

ORWELL ASTRONOMICAL SOCIETY IPSWICH.....

NEW YEAR ISSUE



SOCIETY NEWS

1992 AGM

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* The 1992 AGM is to be held on saturday 11th January 1992. *
* All members are welcome. The venue is at Orwell Park *
* School, with a start at 8.00pm, in the audio visual room. *
* This is the class room in the passage of our former entrance *
* to the observatory. *
* *

1 EVENTS FOR 1992 (Some of these are still provisionl)

- a) January 11th AGM
- b) February 14/15th London Astronomical Conference
- c) Society lecture meeting, (to be arranged)
- d) March 6th London Planetarium Show. This is to be a special evening meeting for Astronomical Society's.
- e) March 7th Oxford University Astronomical Society convention.
- f) Society lecture meeting, (to be arranged).
- g) April 10,11,12 Open Evenings
- h) Society Lecture meeting, (to be arranged).

For more information when it is available please contact any committee member.

2 1992 Subscriptions

Subscriptions are due on 1st January of each year.
Rates for 1992:-

JUNIOR & OAP	£7.50	(under 18 or in full time education)
ADULT	£10.50	
FAMILY	£12.00	

There has been an increase of 50p to take into account the increase in the postage rates for the society newsletter.

Cheques & P.O.'s made payable to the ORWELL ASTRONOMICAL SOCIETY (IPSWICH) together with this form to Membership Secretary:-

Mr. D. Barnard
See back for address

NIGHT SKY

All times GMT

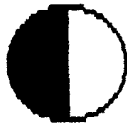
SUN

Rises approximately at 08.15 to 07.50
Sets approximately at 15.50 to 16.50

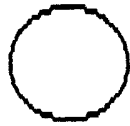
MOON



4th



13th



13th



26th

MERCURY Mercury will be visible in the morning sky for most of this month, through very low down. At the beginning of the month it is rising about 1½ hours before the sun. At the end of the month Mercury will be rising at sun rise.

VENUS Venus remains very prominent in the morning sky. It will be rising about 2 hours before the sun at the start of the month. Mag. -4.0

MARS Mars will be visible in the morning sky. Rising about an hour before the sun. Mag. 1.4

JUPITER Jupiter will be rising at about 20.00 by the end of the month. Mag. -2.3

SATURN Saturn will be very low down in the west this month. It will be at conjunction on the 19th.

URANUS Uranus will be in conjunction with the sun on the 5th, and will not be observable this month

NEPTUNE Neptune will in conjunction with the sun on the 7th, and like Uranus will not be visible this month.

R. Gooding

Some Messier Objects for January

David Payne

Orion is prominent during January shining brightly in the south. Within its borders Orion has three objects listed in the Messier catalogue. All are diffuse nebula and all are part of the great gas and dust cloud that covers much of the constellation. The brightest region is around theta Orionis a group of four stars known as the Trapezium. This region is the famous "Great Nebula in Orion" number M42 in the Messier catalogue. A smaller bright region lying just to the north of M42 and part of the "Great Nebula" is M43. The third Messier object in Orion is M78 a diffuse nebula lying about 2.3 degrees north east of zeta Orionis.

For amateur observers M42 is the finest deep sky object in the heavens even in a small telescope an immense amount of detail is visible. The surface brightness of the nebula is sufficiently high that in 8 inch or larger telescopes high magnification can be used to reveal very intricate detail. M42 is a vast cloud of glowing gas illuminated by the ionising ultraviolet radiation from the stars of the Trapezium. The distance of the nebula is still uncertain but is thought to be around 1600 light years.

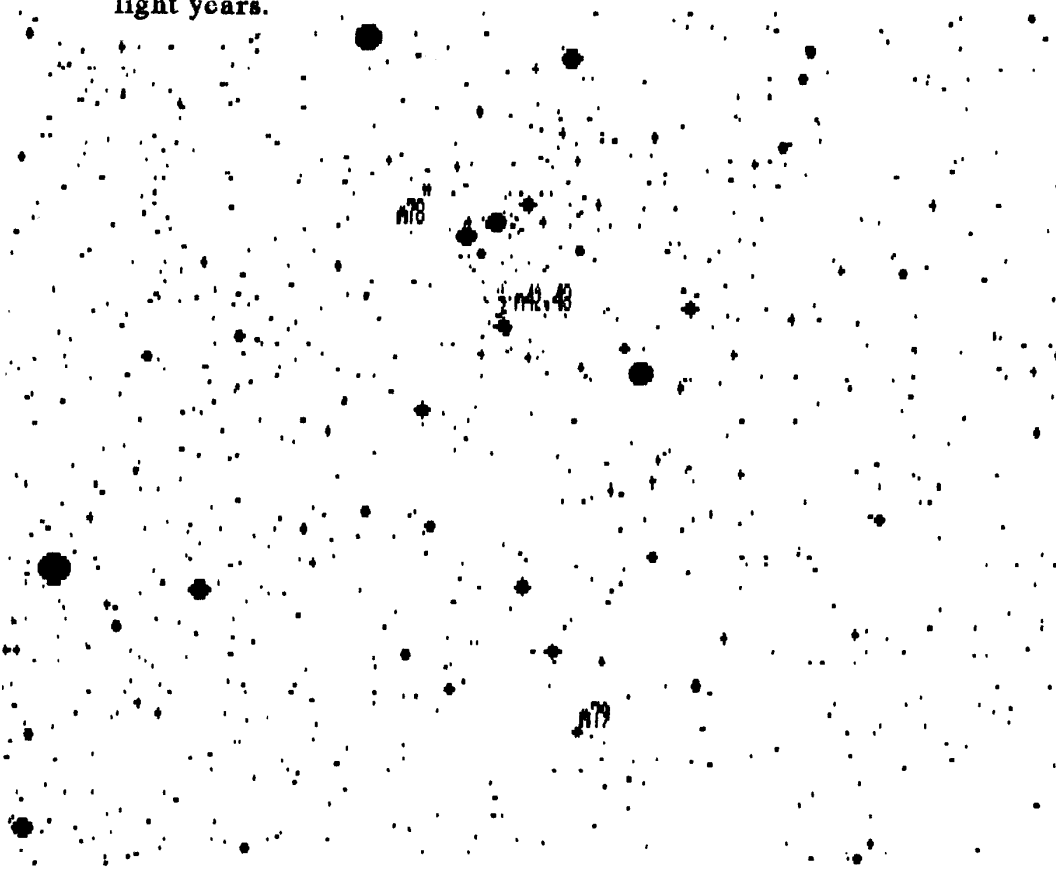
Detached from M42 by a region of dark nebulosity is M43. This bright region is illuminated by a central 8th magnitude star.

M78 is a bright region often overlooked because of the magnificence of the "Great Nebula". It is a bright portion of the same mass of nebulosity but lying several degrees away. In small telescopes M78 looks rather like a faint comet. The

nebula is about the same distance as M42 and M43, approximately 1600 light years.

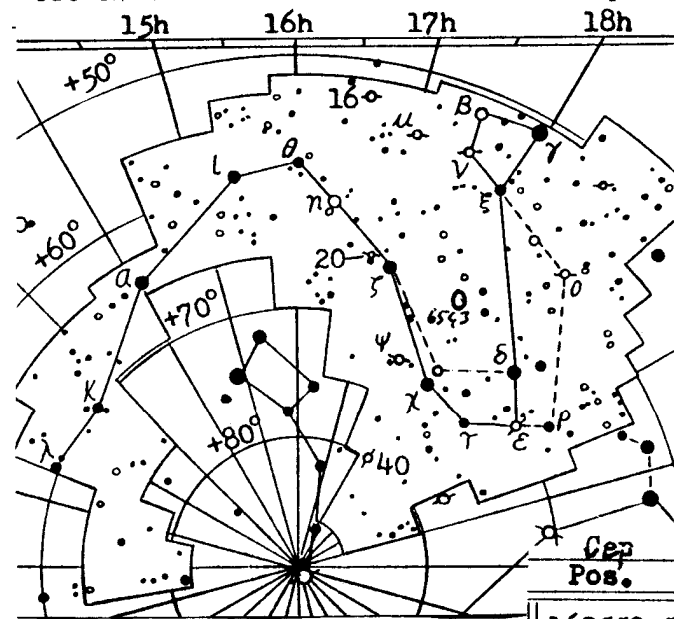
Lying south of Orion is the constellation Lepus which holds one Messier object M79 a globular cluster. this cluster is fairly low down in the south not rising more than about 13 degrees above the horizon. During January the cluster lies to the south and this is a good time to try and observe this object.

Although not one of the most brilliant of globular clusters M78 is worth searching for if you have a clear view to the south and the skies are dark and clear (this is probably the luxury you will not have). In small telescopes M78 appears as a fuzzy circular patch about 3 arc minutes in diameter. In larger telescopes of 8 inches and above it shows some resolution of the outer edges. The distance of the cluster is about 50,000 light years with a full diameter of around 110 light years.



Draco is an extensive constellation of the northern polar region. It represents a dragon lying with one of the feet of Hercules planted on its head.

There is a very prominent planetary nebular (NGC 6543) which appears as an irregular shaped blue-green disk or an out of focus star in a small telescope.



DRACO

Double Stars

Pos.	1 m 2	d"	PA	No.
163553	5.6-5.2	90.6	194	16,17
	5.5-6.5	3.5	111	16
5665	7.1-7.3	1.0	71	20
170454	5.7-5.8	2.2	81	μ
3155	4.9-4.9	62.0	312	ν 1,2
4272	4.9-6.0	30.3	16	ψ
180380	6.1-5.8	19.4	232	40,41
3252	5.4-8.9	25.8	272	E2348
5059	4.7-8.2	34.0	330	0
194870	4.0-7.1	3.3	12	ϵ

μ Both white.
 ν Matched pair of white stars.
 ψ Both white.
 40-41 Both yellow-white.
 E2348 Yellow, blue.
 0 Yellow-orange and green.
 ϵ Yellow, blue.

November 8th 1991

2157hrs. Low in the north, (below the handle of Ursa Major) approximately 22 degrees above the horizon, a blue-green Aurora switched on. Apale curtain like structure extending around 20 degrees horizontally.

Over the next few minutes until 2215hrs the aurora changed colour through yellow and pink and extended upwards until it just brushed Cassiopeia. At 2215hrs the aurora disappeared. At 2228hrs the display reappeared very low, slightly west of its previous starting point. It started as a broad green band, then a red streamer appeared at the centre at 2231hrs and disappeared again at 2234hrs.

Only 5 minutes later at 2239hrs about 20 degrees above the horizon to the east of Ursa Major, a bright red veil started, which then turned pale blue at 2240hrs and then red and blue together. At 2247hrs continued red and blue but started expanding upwards until it extended beyond Cassiopeia, with yellow, green and orange streamers changing positions constantly and disappeared at 2254hrs.

At 2255hrs a BRIGHT GREEN BOLIDE appeared slightly north of west about 70 degrees above the horizon. The first explosion was approximately 55degrees above the horizon. A smaller 2nd explosion approximately 20 degrees above the horizon with a trail visible for approximately 38 secs, estimated magnitude -5 / -6. About 4 seconds after the first flare a faint explosion was heard.

From 3202hrs until 0045hrs mainly red and yellow aurora, fading in and out with long streamers extending past the zenith at times.

Bob Newman. Felixstowe [redacted]

PROGRAMME FOR JANUAURY

Mondays from 8.00pm		GENERAL OBSERVATION SECTION	
6-13-20 27	Mr R Newman	[redacted], Felixstowe, IP11 9DY.	Tel. Fel. [redacted]
	Mr J King	[redacted], Felixstowe, IP11 9LQ.	Tel. Fel. [redacted]
Tuesdays from 8.00pm		GENERAL OBSERVATION SECTION	
7-14-21 28	Mr R Newman	[Address above.]	Tel. Fel. [redacted]
	Mr J King	[Address above.]	Tel. Fel. [redacted]
Wednesdays from 8.00pm		NEBULA AND FAINT OBJECTS SECTION	
8-15-22 29	Mr M Cook	[redacted], Ipswich, IP4 5PZ.	Tel. Ips. [redacted]
	Mr D Payne	[redacted], Wickham Market, IP13 0SD.	Tel. W.M. [redacted]
Fridays from 8.00pm*		PLANETARY AND LUNAR SECTION	
3-10-17 24-31	Mr P Richards	[redacted], Nacton, nr. Ipswich, IP10 0HS.	Tel. Ips. [redacted]
	Mr R A Lobbett	[redacted], Felixstowe, IP11 8UJ.	Tel. Fel. [redacted]
	Mr G Marriott	[redacted], Ipswich, IP4 4JB.	Tel. Ips. [redacted]

* May be re-arranged to the following Saturday.

All nights are open to all members, but, on nights other than Wednesdays, ring directors to confirm. Directors will also be able to tell you if a group visit is taking place. All sections observe anything of interest but the title indicates a popular subject for that evening.

Lectures and other events : 1992 A.G.M.

The AGM will be held on Saturday 11th January at the observatory probably in the room at the rear of the school library. The meeting will start at 20.00 and all members are invited to attend.

1991 COMMITTEE

CHAIRMAN	D Payne	[Address above.]	Home: [redacted] Work: [redacted]
VICE CHAIRMAN & MEMBERSHIP SECRETARY	D Barnard	[redacted], Ipswich, IP3 8RN.	Work: [redacted] /643
SECRETARY	R Gooding	[redacted] Ipswich, IP1 6AE.	Home: [redacted] Work: [redacted]
TREASURER	M Nicholls	[redacted], Capel St Mary, Ipswich, IP9 2EX.	Home: [redacted] Work: [redacted]
MAINTENANCE CO-ORD	M Cook	[Address above.]	Home: [redacted] Work: [redacted]
JOURNAL CO-ORD	E Sims	[redacted], Ipswich, IP1 4HA.	Home: [redacted]
PUBLICITY, VISITS & LIBRARIAN	P Richards	[Address above.]	Home: [redacted] Work: [redacted]
EQUIPMENT CURATOR	J King	[Address above.]	Home: [redacted]
SPECIAL EVENTS CO-ORD	A Smith	[redacted], Ipswich, IP4 5RZ	Home: [redacted]