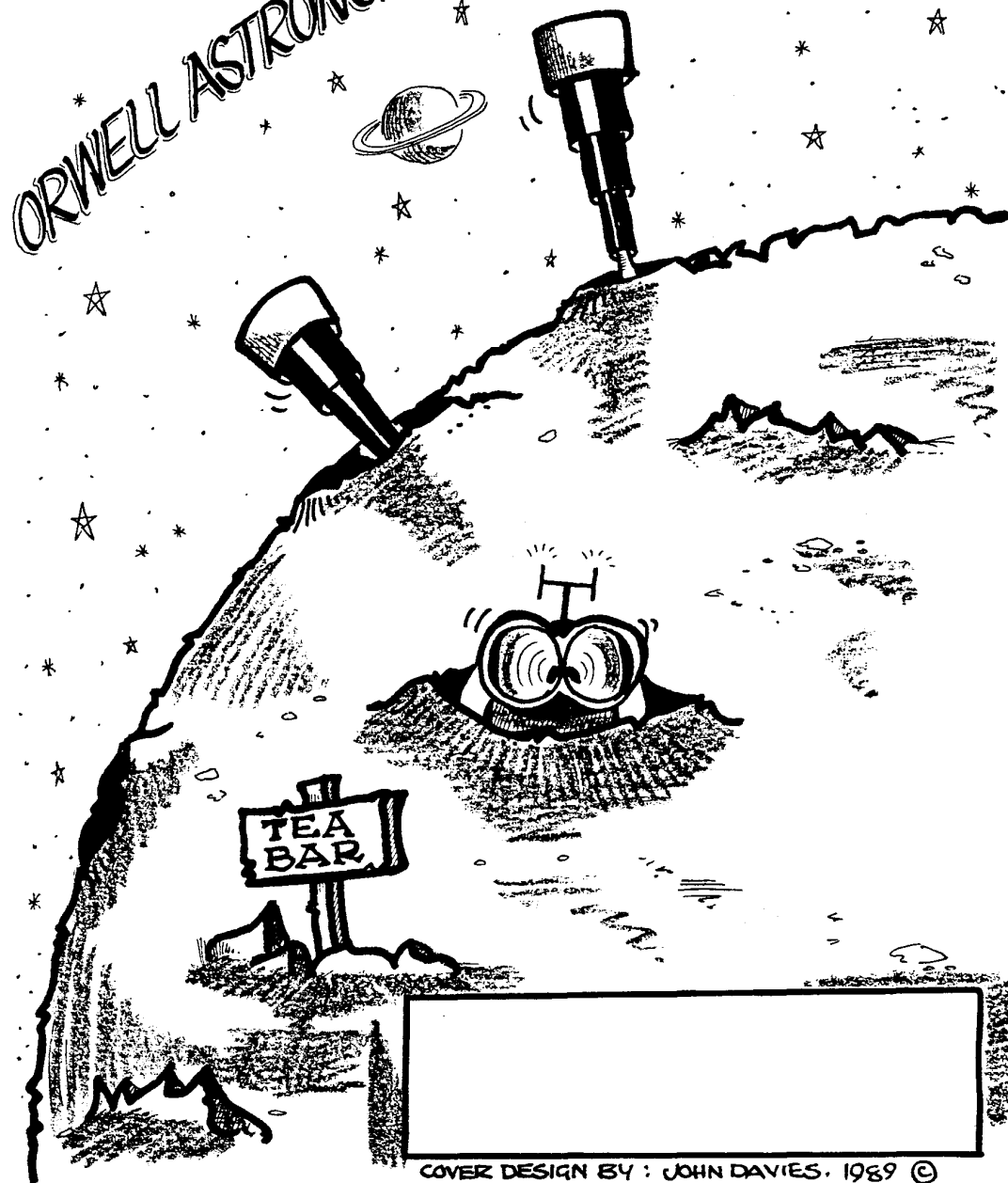


AUGUST 1991

# ORWELL ASTRONOMICAL SOCIETY IPSWICH



## SOCIETY NEWS

### 1 COMMITTEE MEETING

The next committee meeting will be on Saturday 14th September with a start at 7.30pm in the club room. As usual this is an open meeting and any member who wishes to attend will be welcome.

### 2 FAS CONVENTION

The FAS will be holding a convention at Cambridge on Saturday 21st September. The convention will be held at the:-

Pippard Lecture Theatre  
Cavendish Laboratory  
Madingley Road.

The cost of the entrance tickets is £3.50.

People who wish to attend please contact Roy Gooding, as soon as possible.

### 3 OPEN EVENINGS

At the last committee meeting it was decided not to hold any public open evenings this autumn. There is a remarkable absence this autumn of Solar system objects.

The position is much improved in the new year. A series of open evenings will be arranged for March/April period.

## NIGHT SKY

SUN Rises approximately at 04.20 \_ 05.10  
Sets approximately at 20.00 - 19.00

MOON



3rd



10th



17th



25th

COVER DESIGN BY : JOHN DAVIES. 1989 ©

**MERCURY** Mercury will be visible in the evening sky at the beginning of the month. It will be at inferior conjunction on 21st.

**VENUS** Venus will be disappearing into the evening twilight and will be at conjunction with the sun on 22nd of the month.

**MARS** Mars will be difficult to find this month. It will be in the evening twilight, and sets less than one hour after the sun.

**JUPITER** Jupiter will be in conjunction with the sun on 17th of the month.

**SATURN** Saturn will be visible all evening. It is very low down in the south, near the border of Capricornus and Sagittarius. Mag 0.2

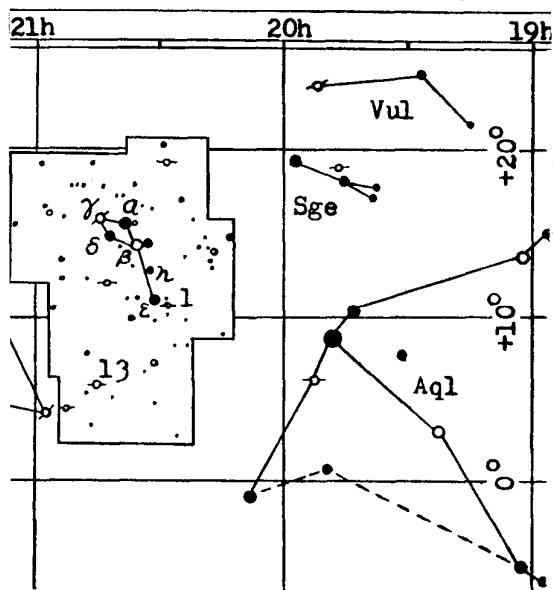
**URANUS** Uranus is in Sagittarius, mag. 5.7

**NEPTUNE** Neptune is also in Sagittarius, mag. 7.9

## DELPHINUS

R. Gooding

A small constellation with a distinctive kite-shape. It represents a dolphin, one of the messengers of the sea god Poseidon. Although not bright its four main stars form a box shaped group known as Jobs Coffin. Delphinus lies on the edge of the Milky Way in an area noted for novae.



### Double Stars

Pos.	1	2	D	d"	PA	No.
202719	6.9-6.5	o	106.	288		
2710	6.1-8.0	b	0.9	347	1	
4212	6.9-8.6	b	1.2	111	E2723	
4415	5.4-4.4	b	10.4	269	γ	
4505	5.6-8.8	b	1.4	189	13	
5304	6.3-7.7	b	2.1	284	E2735	

γ Lovely pair of yellow and pale green stars.

## Deep Sky Objects in Scutum

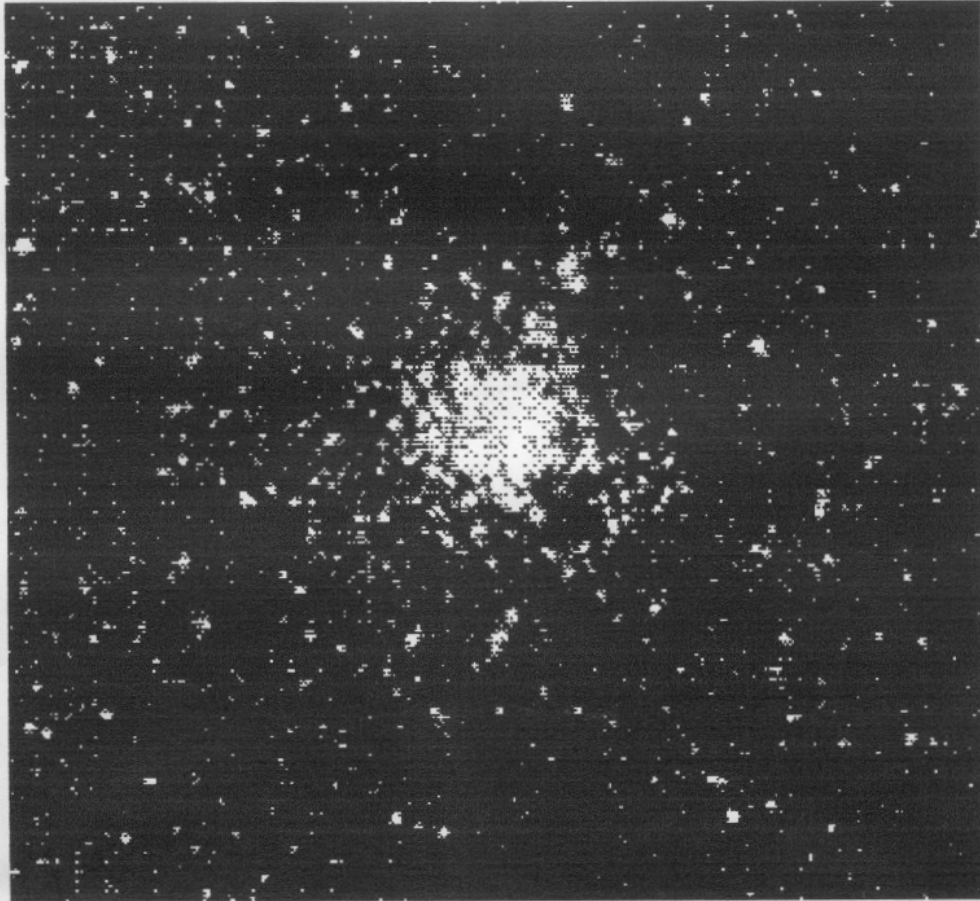
David Payne

The small faint constellation Scutum is near the meridian during August. It contains only one star above 4th magnitude, α at 3.85, and only 6 stars above 5th magnitude. Scutum does however lie in a rich part of the Milky Way and offers some lovely star fields for binocular observers.

Scutum contains within its borders a total of 8 NGC objects two of which are the Messier objects M11 and M26. M11 is known as the "Wild Duck Nebula" and is one of the most beautiful galactic clusters in the sky. It is easy to locate (see chart below) lying ESE of β Scuti and forms a right angle with this star and λ Aquila about 4 degrees to the east. The cluster has an integrated magnitude of 6 and is easily located in binoculars looking very like an unresolved globular cluster. As magnification and aperture is increased the cluster is resolved into a magnificent display of hundreds of stars. The cluster is slightly triangular in shape with the majority of stars lying inside a 12' diameter circle.

M11 lies at a distance of about 5500 light years and is estimated to contain as many as 2900 stars. At this distance the sun would appear as a 16th magnitude star! This means that all the stars visible in moderate telescopes are giant stars the brightest members of which are over 100 times as luminous as the sun. M11 is highly condensed for a galactic cluster most of the stars lying within a 15 light year diameter sphere. Such densities are as great as some of the "looser" globular cluster.

The other Messier object in Scutum is M26 lying ESE of  $\epsilon$  Scuti. It does not compare with M11 but is still a fine cluster worth searching out. It is a fairly small compact group of stars lying inside a 9' diameter circle. It shines with an integrated magnitude of 9.5 and can be easily located with 10x50 binoculars. In a 6 inch (150mm) telescope about 25 true cluster members can be seen out of an estimated 100 total members. The cluster lies at a distance of about 4900 light years, slightly closer than M11, and has a diameter of about 12 light years

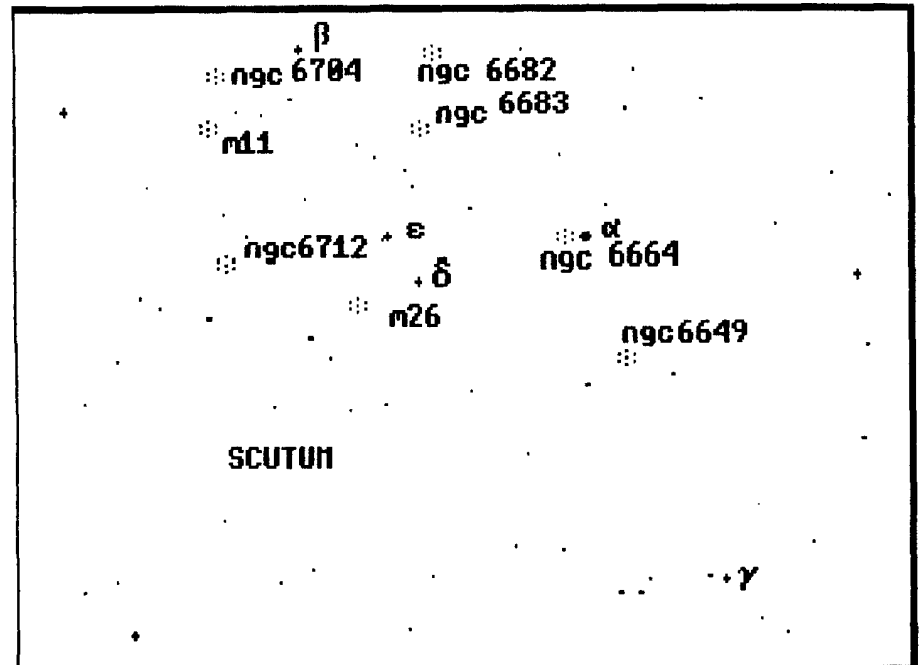


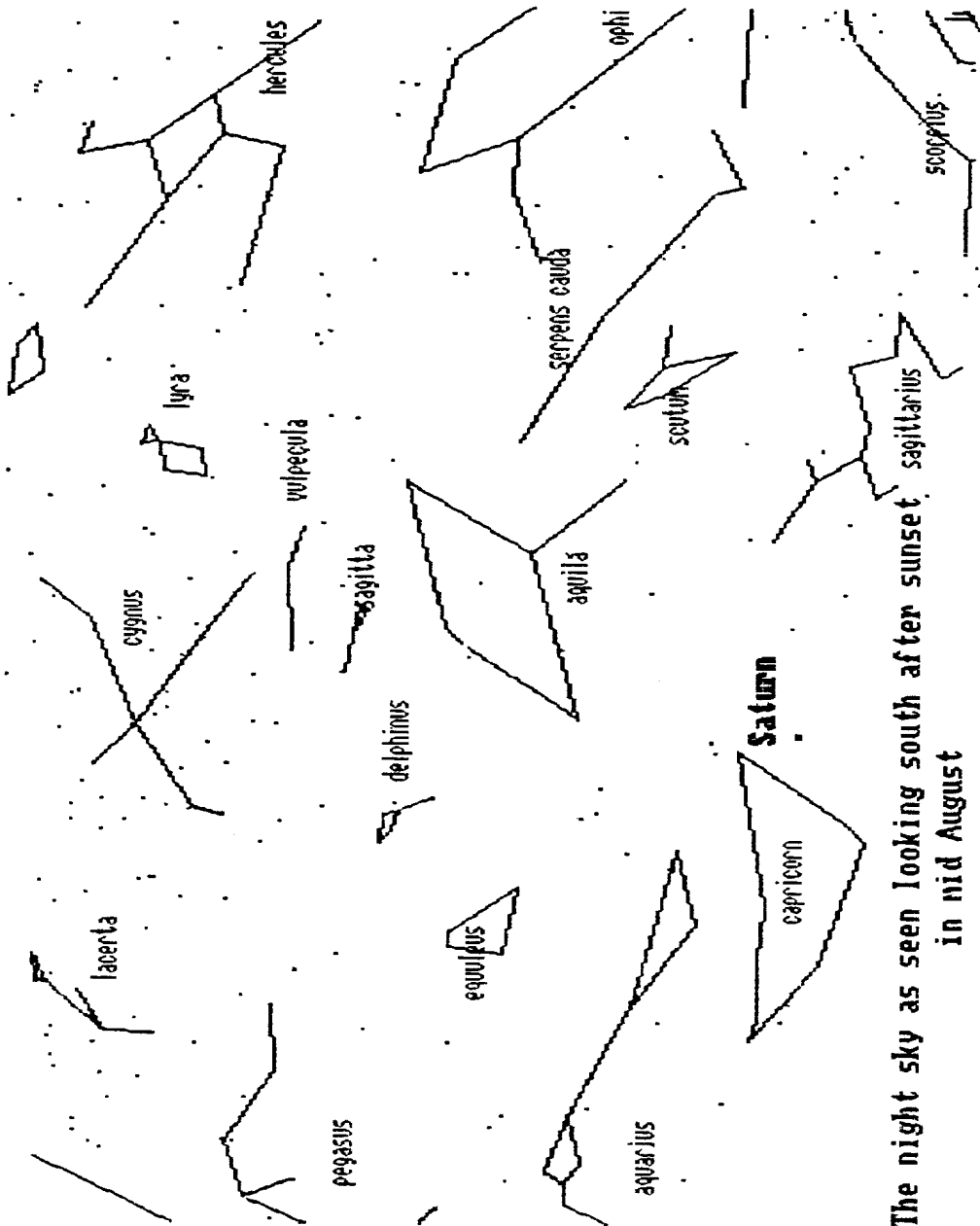
M11 in Scutum

Of the remaining NGC objects three are galactic except one is a faint globular cluster and two (NGC6682 and NGC6683) are probably not true clusters but local condensations in the Milky Way star fields. NGC 6649 is a galactic cluster of about 35 stars in the magnitude range 10 to 14 with an integrated magnitude of 9. It has a diameter of 7' and is resolved in small telescopes although is at it's best in telescopes 8 inches and above. NGC664 is a looser cluster of about 25 stars in a diameter of 18'. The cluster is easily found about 0.5 degrees to the east of  $\alpha$  Scuti and is visible with small telescopes. NGC 6704 is a small cluster only 2' in diameter. It contains about 25 stars in the magnitude range 12 to 143 and is best seen in telescopes of 6 inches or greater aperture.

The globular cluster NGC6712 is a 9th magnitude object 3' in diameter. The brightest stars are magnitude 15 and therefore can only be resolved in large telescopes.

Although small it is worth searching out Scutum to see the beautiful "Wild Duck Nebula" M11. While in this area of sky it is then well worth while searching out M26 and the fainter NGC objects.





The night sky as seen looking south after sunset in mid August

## PROGRAMME FOR AUGUST

DAY	DIRECTORS	SECTION	PHONE No.s
<b>Mondays from 8.00pm</b>			
5-12	Mr R Newman	[redacted], Felixstowe, IP11 9DY.	Tel. Fel. [redacted]
19-26	Mr J King	[redacted], Felixstowe, IP11 9LQ.	Tel. Fel. [redacted]
<b>Tuesdays from 8.00pm</b>			
6-13	Mr R Newman	[Address above.]	Tel. Fel. [redacted]
20-27	Mr J King	[Address above.]	Tel. Fel. [redacted]
<b>Wednesdays from 8.00pm</b>			
7-14	Mr M Cook	[redacted], Ipswich, IP4 5PZ.	Tel. Ips. [redacted]
21-28	Mr D Payne	[redacted], Wickham Market, IP13 0SD.	Tel. W.M. [redacted]
<b>Fridays from 8.00pm</b>			
2-9	Mr P Richards	[redacted], Ipswich, IP4 1QB.	Tel. Ips. [redacted]
16-23	Mr R A Lobbett	[redacted] Felixstowe, IP11 8UJ.	Tel. Fel. [redacted]
30	Mr G Marriott	[redacted], Ipswich, IP4 4JB. [Assistant Director]	Tel. Ips. [redacted]

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 the main specialism.

### Lectures and other events : COMMITTEE MEETING

The next committee meeting will be on Saturday 14th August at the observatory starting at 19.30. As usual this will be an open meeting and any member may attend if they wish.

## 1991 COMMITTEE

CHAIRMAN	D Payne	[Address above.]	Home: [redacted] Work: [redacted]
VICE CHAIRMAN /VISITS CO-ORD	D Barnard	[redacted] Ipswich	Work: [redacted]
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]
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] Work: [redacted]