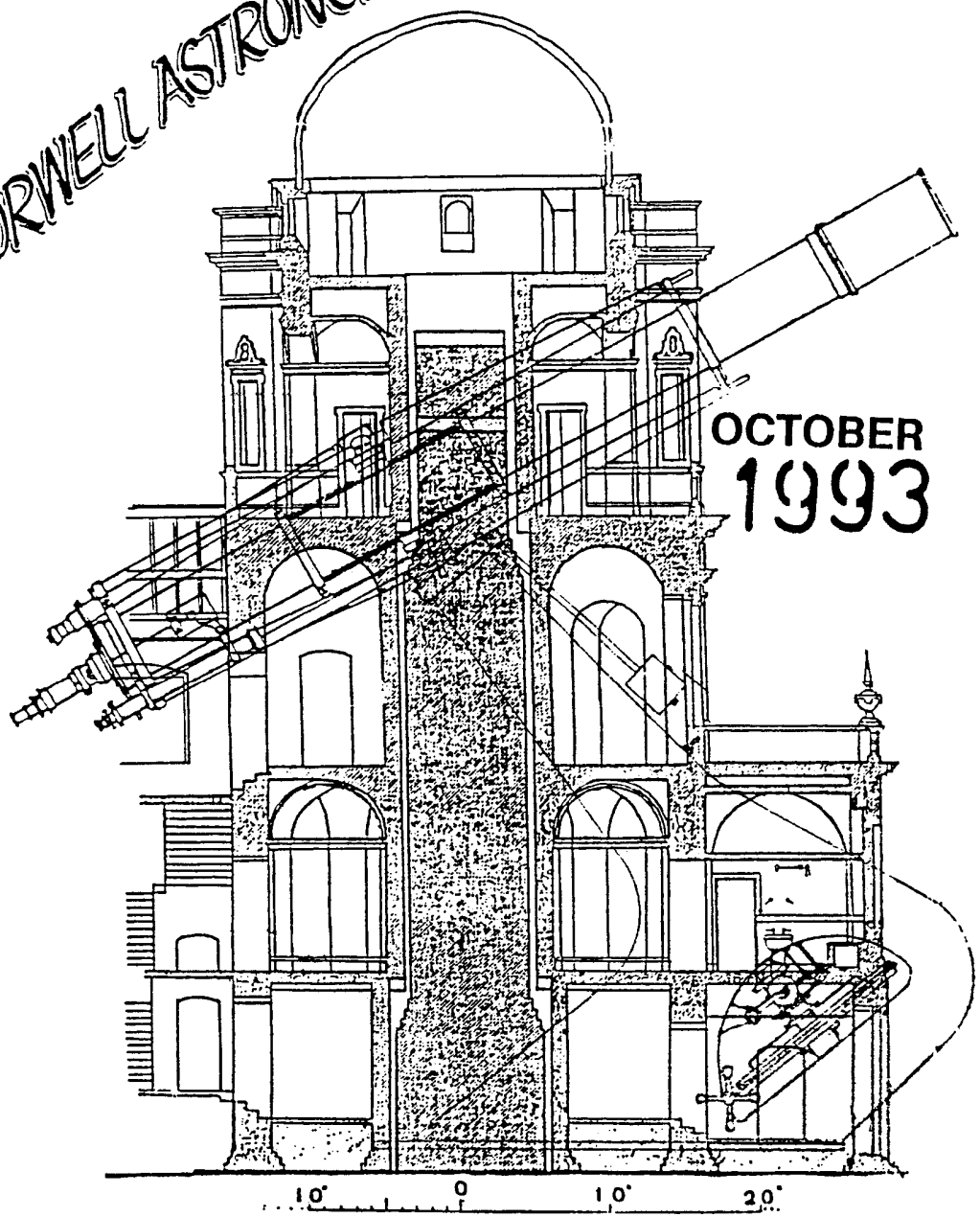
# ORWELL ASTRONOMICAL SOCIETY IPSWICH




**OCTOBER 1993**

# SOCIETY NEWS

1 COMMITTEE MEETING

The meeting for Saturday 2nd October, has been cancelled. A new date has not yet been arranged.

2 CHRISTMAS MEAL

The Christmas meal will be on Wednesday 15th December.

# NIGHT SKY

All times GMT

SUN Rises approximately between 06.00 to 07.00
Sets approximately between 17.50 to 16.50

## MOON

**8th 15th 22nd 30th**

MERCURY Mercury will be at greatest eastern elongation on the 14th ( 25° ). It will be very low in the southwest sky and difficult to see.

VENUS Venus is still visible in the morning sky. It will be rising at about 05.00 in mid month. Mag -3.9.0

MARS Mars will be very low down in the western sky after sunset, setting less than one hour after sunset, making it very difficult to see this month.

JUPITER Jupiter will be at conjunction with the sun, and will not be visible this month.

SATURN Saturn will be visible most of the night, setting at about 01.00 in mid month. Mag. 0.6

URANUS Uranus will be setting at about 21.30, in mid month. Mag. 5.7

NEPTUNE Neptune is close to Uranus in the sky and will be setting at about the same time. Mag. 7.9

*R.Gooding*

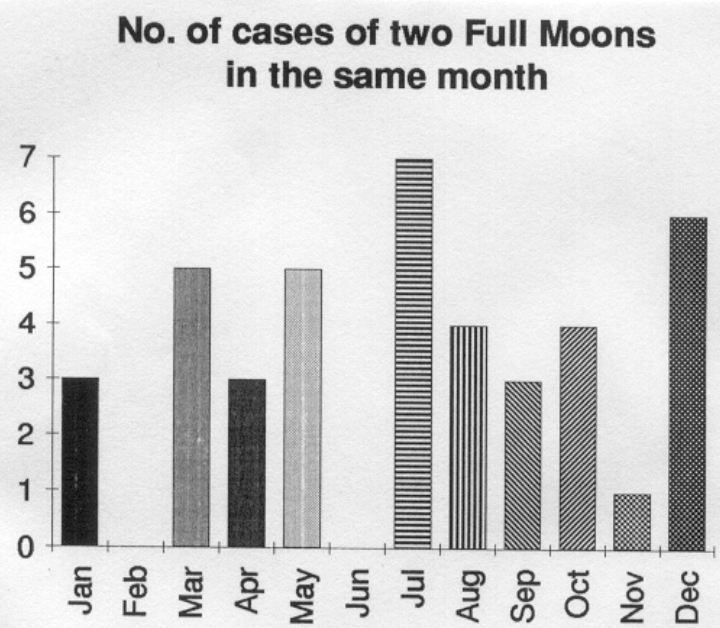
## ONCE IN A BLUE MOON

by James Appleton

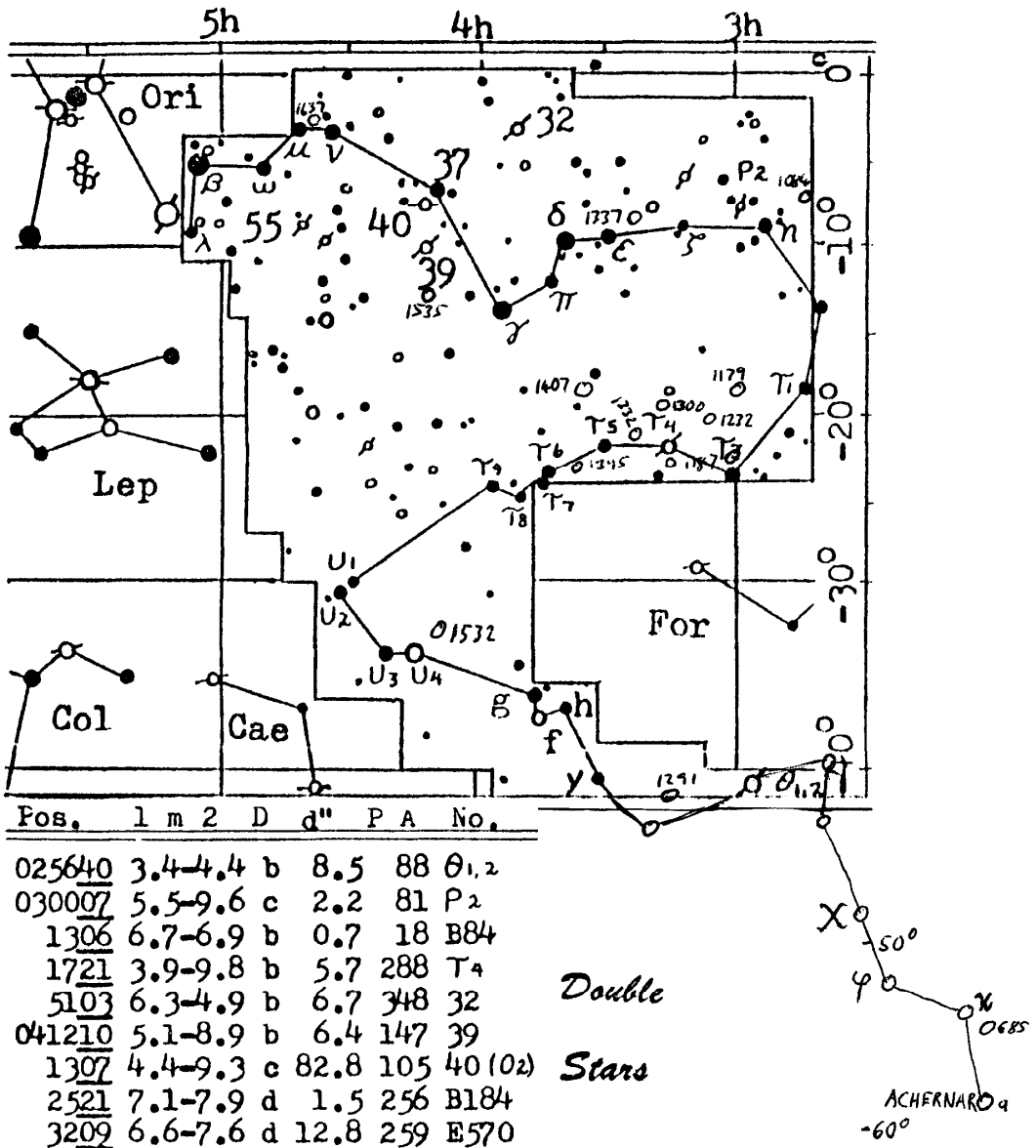
September 1993 was a month in which two Full Moons occurred; namely on the 1st and 30th of the month. This prompted me to ask the question: how frequently does this happen?

I used software in the book *Astronomy On The Personal Computer,* by Montenbruck and Pfegler, to address this question. The starting point was the program NEWMOON, which calculates all the dates of New Moons occurring in a specified year. After considerable experimentation, it proved possible to modify NEWMOON to produce instead a list of dates of Full Moons occurring during the entire 20th Century, and to highlight occasions on which successive Full Moons occurred in the same month.

The results of the computations are as follows. Altogether, there are 41 occasions during this century in which two successive Full Moons occur in the same month. The most prolific years are 1915 and 1961, in each of which there are two such months. The figure below illustrates for each month of the year, the number of occasions during this century in which it hosts two successive Full Moons.




# ERIDANUS




| | | | | | | |
|---|---|---|---|---|---|---|
| 025640 | 3.4-4.4 | b | 8.5 | 88 | θ1,2 |
| 030007 | 5.5-9.6 | c | 2.2 | 81 | P2 |
| 1306 | 6.7-6.9 | b | 0.7 | 18 | B84 |
| 1721 | 3.9-9.8 | b | 5.7 | 288 | T4 |
| 5103 | 6.3-4.9 | b | 6.7 | 348 | 32 |
| 041210 | 5.1-8.9 | b | 6.4 | 147 | 39 |
| 1307 | 4.4-9.3 | c | 82.8 | 105 | 40 (02) |
| 2521 | 7.1-7.9 | d | 1.5 | 256 | B184 |
| 3209 | 6.6-7.6 | d | 12.8 | 259 | E570 |
| 4108 | 6.7-6.6 | c | 9.2 | 317 | 55 |

Eridanus is one of the largest constellations in the sky. It begins to the west of Orions Belt and wanders southwards gradually narrowing until it ends at the brilliant star Achernar at −57.0° declination. This means that at best you will only be able to see about two thirds of this constellation from our latitude. There are many small groupings along the looping progress ofEridanus, but no overall shape is apparent except for the curving path of relatively faint stars, which need a dark night to trace southwards.

THe planetary nebula NGC1535 is one of the brightest examples of its type.It is about half an arcminuet in diameter, of 9th magnitude and bluish in colour. An11th Mag central star is visible in larger instruments.

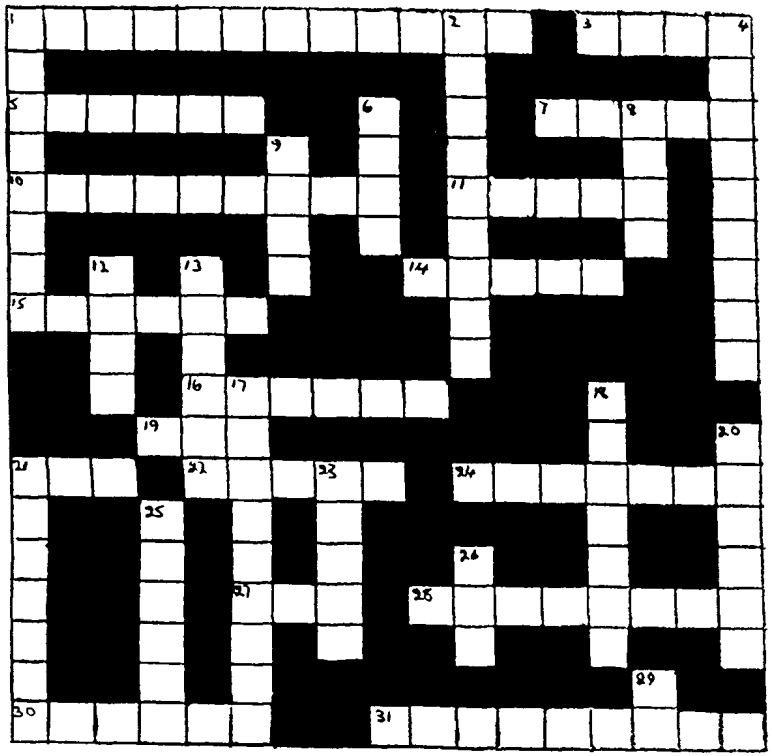
Of the several galaxies in this part of the sky NGC 1300 should be mentioned as an outstanding example of a barrel spiral galaxy. This 11th mag object has prominent arms which start at the end of a faint bar protruding from the nuclius.

As you can see from my map there are a lot of other galaxies i have added but not mentoined,also the map i used didnt show the lower end of the constellation so i added this freehand and cant guarantee the accuracy of the drawing.

$\theta_{1,2}$ Brilliant pair of white stars.

32 Vivid colors of yellow and greenish-blue.

55 Yellow, white.



Clues.

Across.

1/ Presenter of Sky at Night.
3/ American space organisation.
5/ Gallilean satellite.
7/ Earths is twenty three miles thick.
10/ Instrument once used for plotting.stars.
11/ Constellation in line with the Ecliptic.
14/ Moon of Saturn only nineteen miles in Diameter.
15/ Fifth planet from the Sun.
16/ Clouds in space.
19/ Centre of the Solar System.
21/ Martian day.
22/ Steep slope in a planet or moons surface.
24/ Constellation in line with the Ecliptic.
27/ Constellation that contains the stars Zeta and Eta.
28/ Our Sun will eventually turn into one.
30/ Constellation in which the Hyades belong.
31/ Explosive end to a star.

Down.

1/ Seven Sisters.
2/ Type of telescope.
4/ There are lots of them between Mars and Jupiter.
6/ One of Saturns moons.
8/ Constellation,could be Major or Minor.
9/ Red planet.
12/ Our Sun is one.
13/ Seventh planet from the Sun.
17/ Saturnian moon over 300 miles in diameter.
18/ Type of meteor we have seen recently.
20/ Halleys one of these.
21/ Cool dark area on The Suns surface
23/ One of these was used to map Venus.
25/ Tiny particle that burns up on entering our atmosphere.
26/ Constellation of the Lion.
29/ Gallilean satellite.

# CHRISTMAS MEAL

WEDNESDAY 15th DECEMBER

AT THE RED LION
MARTLESHAM

COST WILL BE £12.95 PER PERSON
CHILDREN UNDER 12 £7.50

A NON RETURNABLE DEPOSIT OF
£5.00 PER HEAD IS REQUIRED

PLEASE SEND ALL MONIES TO
ROY GOODING ASAP

TABLES ARE BOOKED FOR 9.00pm

## PROGRAMME FOR OCTOBER

| DAYS &DATES | DIRECTORS | SECTION & ADDRESSES | PHONE INC. STD CODE |
|---|---|---|---|
| Mondays | from 7.30pm | GENERAL OBSERVATION SECTION | |
| 4-11-18-25 | Mr R Newman | [redacted], Felixstowe, IP11 9DY | [redacted] |
| | Mr J King | [redacted], Felixstowe, IP11 9LQ | |
| Tuesdays | form 7.30pm | GENERAL OBSERVATION SECTION | |
| 5-12-19-26 | Mr R Newman | (Address above.) | (Number above) |
| | Mr J King | (Address above.) | (Number above) |
| Wednesdays | from 8.00pm | NEBULA & FAINT OBJECTS SECTION | |
| 6-13-20-27 | Mr M Cook | [redacted], Ipswich, IP4 5PZ | [redacted] |
| | Mr D Payne | [redacted], Wickham Market, IP13 0SD | |
| Thursdays | from 7.30pm | OBSERVATORY VISITS FROM OUTSIDE GROUPS | |
| 7-14-21-28 | Mr P Richards | [redacted], Nacton, Ipswich, IP10 0HS | [redacted] |
| | Mr G Marriott | [redacted] Ipswich, IP4 4JB | |
| Fridays | from 7.30pm (may be postponed to Saturday) | PLANETARY & LUNAR SECTION | |
| 1-8-15-22-29 | Mr P Richards | (Address above.) | (Number above) |
| | Mr R A Lobbett | [redacted], Felixstowe, IP11 8UJ | [redacted] |
| | Mr G Marriott | (Address above.) | (Number above) |

All members are welcome to come but, on nights other than Wednesdays please check with directors that the observatory will be open. Directors will also be able to tell you if a group visit is taking place. All of the sections observe anything of interest but the title of each section suggests a popular subject.

Lectures and other events:

THE COMMITTEE MEETING DUE TO TAKE PLACE ON 2nd OCTOBER HAS BEEN CANCELED. A NEW DATE WILL BE ARRANGED AND MEMBERS ADVISED AS SOON AS POSSIBLE.

1993 COMMITTEE

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