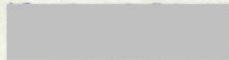




JOURNAL OF THE  
ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

DECEMBER, 1973

Editor: Mr. C. Radley,



WHERSTEAD,

Ipswich,  
IP2 8NQ

Phone Ipswich [REDACTED]

██████████,  
IPSWICH.  
21st December, 1973.

Dear Member,

As my first year as Chairman of the Orwell Astronomical Society (Ipswich) draws to a close, I would like to express my sincere thanks to everyone who has helped me during the past year to make my job as enjoyable and as easy as possible.

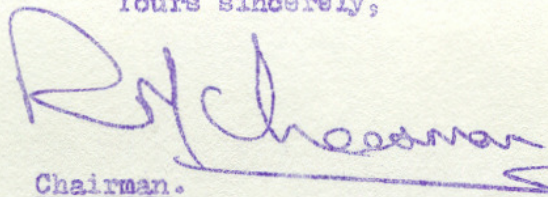
The past year for our Society has been a very successful one for we have realized many ambitions such as having the main optics of the telescope completely overhauled making our instrument a first class one to work with. Also during the year we have done a great deal of work to the observatory and my thanks go to the many members who devoted so much of their spare time to restore the observatory to its original splendour. We have held three lectures during the past months which were truly successful, enjoyable and educational.

The observatory has been opened for members over one-hundred and twenty times during the past year compared with only about 58 last year and a great deal more members are actively participating in our Society.

May I remind you that the Annual General Meeting of our Society will be held in the library of Orwell Park School Nacton on Friday 4th January at 8p.m.

Wishing you all a very happy Christmas and a prosperous New Year,

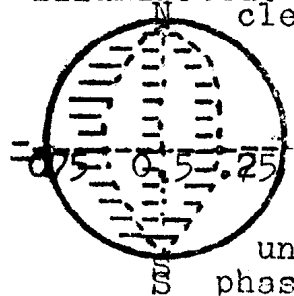
Yours sincerely,

  
Chairman.

## "WHAT'S UP?" The Planets in January:\*

**MERCURY** On Sunday December 2nd from 05h until 08h U.T. Roy Cheesman was at the observatory, searching for Kohoutek. He did not find it, but reported seeing Mercury. On the same morning, I understand that another OASD member, John Dean, saw Mercury also. The late November/early December elongation of Mercury in the morning sky was very favourable, apparently. When Roy looked at it thru' the 10" OG he did not use a high magnification, so it appeared little more than a spot of light. If he had raised the power he may have been able to see its phase, which was gibbous, between half-full and full. It was a very small disk (only 6" arc across), so a large telescope was needed to see it well.

The January/February evening (1974) elongation of Mercury should be also be favourable. It will be best in early February, maximum elongation on February 9th. It is predicted that the phase will be exactly half-full at greatest elongation, small gibbous disk before, and slightly larger crescent phase after maximum elongation. It will be brighter before elongation than after. If members could make phase observations of Mercury thru' the 10" OG immediately after sunset in January and February, it would be useful observation. Phase estimates are made in the form of a decimal number, eg 0.9, or 0.55 etc. Half full is 0.50, full is 1.00. Crescent phase will be a number less than 0.5, gibbous, between 0.50 and 1.00. To make a phase estimate, imagine the planet as a completed disk, and imagine a line perpendicular to the poles of the planet (the horns of the crescent), and estimate what fraction of that diameter is illuminated. If this is not clear, perhaps the diagram makes it



clearer; it shows a disk (Mercury). The horizontal dotted diameter is the equator. The two poles (N & S) are shown. If when observing you are not sure which is which, phase estimates are unaffected. Imagine the vertical dotted lines to be terminators at various phases, and the disk to the left of the terminator in each case (the shaded portion) to be unilluminated. The number (0.75, .50 & .25, are the three phases exhibited here.

On January 28th, Mercury will be  $0.9^{\circ}$  South of Jupiter in the sky. Its predicted phase is then 0.899, mag -1.0, diameter 5.4". It sets shortly after sunset, and may be seen in the south-west after sunset, near Venus and Jupiter, and Kohoutek!!

**VENUS** is visible in the south-west after sunset. It is now a large crescent, and after the end of this month it will not be seen very well. Its phase (unlike that of Mercury) can easily be seen in a small telescope or even good binoculars, such as many members own. A coloured filter (such as the green "Moon" filter employed in Dixon's telescopes) makes the image clearer. For observations in twilight, a Kodak Wratten 15 Yellow filter is recommended, and can be obtained from Turners, the Walk, Ipswich, for 40p.

**MARS** is still fairly high and bright in ARIES, but is becoming more distant.

**JUPITER** is now in the evening twilight, and will not be seen after the end of this month.

Remember to hunt out Jupiter & thus Mercury on January 9th, and also 8th & 10th weather permitting; once you have found Mercury you should be able to follow it evening by evening.

**SATURN** The rings are wide open, very well visible. It reaches maximum northerly declination of  $+22^{\circ}$  in Gemini early this year. This means it is all of  $60^{\circ}$  above the horizon at transit. Opposition was dated December 23rd 1973.

Saturn is occulted by the Moon on February 3rd at 16h U.T., around sunset. To observe this event. Find the Moon in the south east high up an hour before sunset, using a yellow coloured filter you should be able to see the planet disappear behind the dark edge of the Moon, and reappear from the bright. Disappear at 15h07m reappear at 15h34m. This is in daylight, but should not be too difficult to see in binoculars or a telescope.

METEORS The Quadrantid meteor shower will be visible this month, maximum on January 3rd. 110 meteors per hour should be seen before dawn on January 3rd, and the evening of January 3rd to a lesser extent. It lasts from January 1st to 5th.

### COMET KOHOUTEK

Now is the time to look out for it. Throughout January it should be visible, but it is unlikely to live up to the previous optimistic predictions. A chart was given in last month's newsletter. From January 3rd onwards, it is worthwhile looking in the southwest after sunset, when the sky starts to become dark. Around January 8th & 9th the Comet will be close to Jupiter and Venus in the sky. It will be in Capricornus from 3rd until 13th January, 13th until end of month it will be in Capricornus. Days set aside by IAU to observe the Comet are:- January 1st, 4th, 10th, 15th, 22nd.

Observing it immediately after sunset thru' our 10"OG, efforts should be made to observe the Comet or head of the comet, for structure in it. The tail could become very long in January. The Moon will be very close to the Comet on January 26th.

To photograph the comet, use a 35mm camera with fast film (eg. Ilford HP4, Kodak TRI-X (both B&W) or Agfa Ansachrome (colour)) point your 35mm camera at the comet, and make exposures ranging from 15 seconds to two minutes. Best results should be obtained in up to 30 seconds; above that, with an unguided camera, it will start to appear to move across the sky, and appear blurred on the film. Bimoculars are best for observing the comet visually.

The 10"OG on lowest magnification would be good for performing observations of the Comet and nucleus of the comet which IAU and BAA require.

We are holding a KOHOUTEK WEEK in the middle of January, inviting the general public up to the observatory on certain days in January immediately after sunset, to observe the comet through the 10"OG.

We are also organising an exhibition on astronomy and the Comet at the Ipswich Museum, in the geology section. Why not go and see it.

Details of the Kohoutek week will be given in the Evening star newspaper, and on Roy's pages in this newsletter.

### DISTRIBUTION PROBLEMS.

Up till now I have been able to distribute these newsletters at great inconvenience to myself. Now however, I have become very busy, and am likely to remain so until I leave the area in Autumn or Summer 1974. This means, that this is your LAST CHANCE TO SEND ME STAMPED ADDRESSED ENVELOPES. If it is inconvenient to deliver the newsletter myself, and nobody else is able to deliver it for me, you simply won't get it.

### PLANS FOR 1974

There are tentative plans for various meetings in 1974. AGM in January. Possible meeting in early February, with possible visit by Patrick Moore in late February.

Visit to University of Cambridge Radio and optical observatories all day Saturday April 6th. Please book seats by writing to Roy Cheesman as soon as possible.

Saturday May 4th, meeting in co-operation with the J.A.S. Hopefully at Orwell Park, but if there is petrol rationing, it will be held at the Friends Meeting House, Fonnereau Road, Ipswich.

In June we are considering inviting Peter Gill from London to talk on "The Sun". In September we hope to have another Open Day at the Observatory.

MINUTES OF THE COMMITTEE MEETING

3rd DECEMBER, 1973.

Present: R.M. Cheesman, V. Wilkes, D. Bearcroft, M. Stowe.

Apologies: M. Hadden, G. Collier, C. Radley.

The minutes of the previous meeting were read and agreed.

Matters Arising:

B.A.A. And J.A.S. Meetings at Ipswich.

The committee was informed that concrete dates had still not been fixed.

LECTURES.

More lectures were proposed in the new year but so far no speaker had been booked and dates were being arranged.

COMMITTEE OFFICERS, 1974.

The Chairman informed the committee that he would like two additional members to be proposed at the next A.G.M. to be officers of the Society to help and replace Mr. M. Hadden (Secretary) and Mr. C. Radley (Editor) if they were elected to the committee as these two officers would be going away to college during 1974.

DOMS SHUTTER:

The Chairman reported that during the last month the shutter had fallen off the rails and with the assistance of Mr. D. Bearcroft he had replaced the shutter on the rails again. On investigating the circumstances as to why the shutter came off the rails it was found that the shutter had been closed by people who had never had any tuition on closing the shutter. It was therefor decided that only members who had been given tuition on closing the shutter should be authorized to close the shutter. The members authorized by the committee to close and open the shutter are:

- |                              |               |
|------------------------------|---------------|
| 1. Members of the committee. | 6. K. Harris  |
| 2. R. Hazlewood.             | 7. T. Day     |
| 3. A. Farthing.              | 8. D. Brown   |
| 4. John Haywood              | 9. K. Dye.    |
| 5. Janet Haywood             | 10. J. Deans. |

Any members who would like tuition on closing the shutter should apply to R.M. Cheesman or D. Bearcroft and on satisfactory report will be proposed to the committee that they should authorize those members who have undergone tuition to open and shut the shutter.

COMET KOHOOTEK.

The Chairman proposed that the Society should hold open days during the middle of January so that the general public could observe the comet through the Orwell Park telescope. Mr. B.H. Bell, headmaster of the school had been approached by the Chairman proposing such an open day and Mr. Bell had given his permission for us to do so. The dates agreed were, from 4.30p.m. on Wed 16th January, Friday 18th and Saturday 19th. Helpers on these would be appreciated and should contact the Chairman.

Mr. C. Radley had reported to the chairman that he had been approached by the Ipswich Museum to arrange a stand in the museum on the comet plus details and history of the Orwell Park telescope. It was agreed that the Chairman together with Mr. C. Radley should arrange such a display.

As there was no other business the Chairman called the meeting to a close.

NEXT MEETING:

ANNUAL GENERAL MEETING in the Library of Orwell Park

School at 8p.m. on Friday 4th January, 1974. *in Eving?*

MEMBERSHIP SUBSCRIPTIONS 1974.

All membership subscriptions for 1974 become due on 1st January, 1974 and are at the following rates:

Junior Membership (those under 18 years of age)	5p.
Full Membership	£1.50p.
Family Membership	£2.00p.

Cheques/postal orders should be made out to Orwell Astronomical Society (Ipswich) and should be sent to me at the following address:-

Mr. G. Collier,  
[REDACTED]  
Church Street,  
CHELMONDISTON,  
Nr. Ipswich.

TREASURER.

ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

██████████,  
IPSWICH.

1st December, 1973.

You are invited to attend the Annual General Meeting of the Orwell Astronomical Society (Ipswich) which will take place in the Library of Orwell Park School Naaton on Friday 4th January, 1974 at 8p.m.

ELECTION OF OFFICERS FOR 1974.

The undermentioned officers elected at the last A.G.M. are willing to be re-elected if required. Any further nominations for officers of our Society should be sent to me by 31st December, 1973.

Officers elected at the last A.G.M.

Mr. R.M. Cheesman, ██████████, Ipswich (Chairman)  
Mr. M. Hadden, ██████████, Ipswich (Secretary)  
Mr. G. Collier, ██████████, Church Street, Chelmondiston (Treasurer)  
Mr. C. Radley, ██████████, Whiststead, Nr. Ipswich. (Editor)  
Mr. D. Bearcroft, ██████████, Ipswich.  
Mr. N. Stow, ██████████, Ipswich.  
Mr. V. Wilkes, ██████████, Ipswich.

M. S. Hadden

M. Hadden, (Secretary)

ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

CLUB NIGHTS JANUARY, 1974.

IMPORTANT: If petrol goes on ration please contact the director of the club night you wish to attend to ensure that the night will be held.

MONDAYS: from 8 p.m.  
Directors: K. Harris, [redacted] Ipswich, Tel. [redacted]  
and T. Day, [redacted], Elmsett, Tel. Offton [redacted]  
January 7th  
" 21st.

TUESDAYS: from 8p.m.  
Directors: G. Collier, [redacted], Church Street, Chelmondiston  
Tel. Woolverstone [redacted]  
and A. Farthing, [redacted], Winesham.  
January 1st  
" 15th  
" 29th

TUESDAYS. from 8p.m.  
Director: D. Bearcroft, [redacted], Ipswich, Tel. [redacted]  
January 8th  
" 22nd  
February 5th

WEDNESDAYS: from 7p.m.  
Director: R.M. Cheesman, [redacted], Ipswich  
January 2nd  
" 16th  
" 30th  
from 8.30p.m. January 9th  
" 23rd.

FRIDAYS: from 8p.m.  
Directors: M. Stow, [redacted], Ipswich  
and R. Hazlewood, [redacted], Ipswich, Tel. [redacted]  
January 18th  
February 1st.

FRIDAYS: from 8p.m.  
Directors: J. Deans, [redacted], Chapel St. Mary,  
Phone Ipswich [redacted]  
and K. Dye, 16 Epsom Drive, Ipswich, Tel. [redacted]

SATURDAY 12th January, booked for party from Ipswich Museum organized by R.M. Cheesman.

SPECIAL NIGHTS.

from 4.30p.m. on Wednesday 16th January, Friday 18th January and Saturday 19th January Special open nights to observe the Comet Kohoutek. These nights will be open to the general public to observe the Comet and members help is required to assist on these nights. These nights will be organised by R.M. Cheesman and further details should be obtained either from Mr. Cheesman or from the Secretary, Mr. M. Hadden, Phone Ipswich [redacted].

Organised parties who wish to observe the Comet through the telescope should contact the Chairman, R.M. Cheesman, 3 Tasmania Road, Ipswich.

FRIDAY 4th JANUARY 1973 A.S.M. AT ORWELL PARK SCHOOL NCTB

AT 8PM