



JOURNAL of the
ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

NOVEMBER, 1973

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If you have any articles you would like inserted in the Journal,
or any questions, comments, criticisms or suggestions please send them to
the Editor.

SOCIETY MEETINGS:-

Meetings organised for the first Friday of each month are:-
November 2nd, M.J.Hendrie F.R.A.S. talks on Comets.

December 7th C.R.Munford F.R.A.S. talks on Variable Stars

January 4th(?) Annual General Meeting(Orwell Park School)

Meetings are at 8p.m., at The Friends Meeting House, unless otherwise stated.

All members are invited, please bring lots of friends, the more the merrier!!

KOHOUTEK from now on keep a good look out for Comet Kohoutek. It will reach elongation on about November 13th, it will then be in Corvus, a few degrees due north of the star gamma which is magnitude +2½. November 18th & 19th it will be one or two degrees north of the star delta in corvus, which is mag +3½. It will be some eight degrees due south of Spica in Virgo on 23rd November. The Moon should be within some degrees of the Comet on November 24th in the morning.

On Nov. umber 23th the comet rises at about 4 a.m. G.M.T. The Sun rises at about 07h30m U.T. As time goes on, the interval between comet rise and sunrise grows less, but the comet grows brighter. By the end of November the comet should be a naked eye object. At around November 13th or 14th it may be visible in binoculars.

"What's Up?"The Planets in November:-

MERCURY has an elongation this month, being furthest from the Sun on November 27th, it will be a morning star after its transit on November 10th. On November 10th it will be seen to traverse across the face of the Sun, starting by touching the Sun at 7h48.2mU.T., leaving the solar disk at 13h15.8mU.T. The middle of the transit will be at 10h33m U.T.. Sunrise will be at 07h15mU.T. Mercury should be visible as a dark spot, perfectly round, slowly traversing the solar disk on the projected image of the Sun or to a piece of card from as large a telescope as possible. Orwell Park observatory may be opened to observe the event.

After the transit, Mercury may be glimpsed as a morning star from about Nov 18th-28th, rising at around just after 06h a.m. U.T. It will be visible in the east in the morning twilight in constellation of Libra, moving through Scorpio into Ophiuchus in December. On December 14th in the morning it will be 1° due south of Neptune in Scorpio.

VENUS is an evening star this month. For the first time this year it is starting to become fairly conspicuous in the evening sky after sunset, At the start of the month it sets at 18h30mU.T.(2 hours after Sun), at the end it sets at 19h00m U.T.(3hours after Sun). Maximum elongation from the Sun will be on November 13th, with a separation of 47°. Throughout the month t planet brightens, from -4.0 to -4.3. Its phase changes throughout the month from being a small gibbous disk at the start, to a larger more cresce shape by the end, half full phase(dichotomy)should be on about November 13t

MARS is still bright, visible in the constellation Aries, but growing dimmer and smaller as time goes on.

JUPITERstill fairly bright in the evening sky, although it is slowly fading and receding into the evening twilight as time goes on.

Mutual phenomena of Jupiter's Moons:-

Date	Time(UT)	Middle Event	of by.	Duration	
15th	18h10m	Eclipse of IV	by III	900 seconds(penumbral only)	
22nd	16h55m	"	of II	by I	180seconds(umbra duration)
29th	19h09m	"	of III	by I	160seconds(umbra duration)

SATURN becomes better visible during the month. It is in Gemini, between the twin stars and Taurus. On November 13th the Moon will be very close to the planet. Saturn has a very high altitude at transit due to its high northerly declination. It is visible from late evening until dawn. In December the planet will be occulted by the Moon.

THE MOON Phases:- New Moon October 26th, First Quarter November 3rd, Full Moon November 10th, Last Quarter November 17th, New Moon November 24th, First Quarter December 3rd. Perigee November 12th.

METEORS:- No large showers are predicted for this month.

BAA HANDBOOK 1974 If you would like a copy of the 1974 BAA Handbook please let me have 60p(in advance please) and I will obtain a copy for you. This book contains predictions of all astronomical happenings in 1974. With this and Norton's Star Atlas you should be equipped for much astronomy, all you then need is some form of optical aid if you feel you need it.

September 21-23 Belstead House Astronomy Course was very enjoyable.

The lecturers were:- Dr. Simon Mitton, Mrs. Jacqueline Mitton, and Dr. Andrew Fabian, all qualified astronomers from Cambridge Institute of astronomy. Dr. Mitton is a qualified radio astronomer, who has conducted much astronomical research (only the previous week he had told us of his latest discovery about quasars in Norwich) and writing and publishing astronomy. Mrs. Mitton teaches astronomy, and is interested particularly in stellar astronomy. Dr. Andrew Fabian researches into X-ray astronomy, and has launched Skylark rockets from Woomera.

The first talk was by Dr. Mitton on space exploration, of Venus and Mars particularly. We then went outside, and with a couple of small telescopes, a few binoculars and many pairs of eyes had some star-gazing. On the Saturday Dr. Mitton talked on astronomy, followed by Dr. Fabian speaking on cosmic dust clouds, about how they formed, what they looked like, and how stars were forming from them. After lunch Dr. Fabian went on to talk about his research into X-ray astronomy, and the discoveries that have been made, include some spectacular pictures on him launching rockets, and one rocket which had crashed nose first into the ground, looking like a giant dart.

Jacqueline Mitton then spoke about the Sun. After dinner in the evening everybody trooped up to Nacton and looked at Jupiter through our telescope. When it became cloudy public opinion forced us to close the observatory and go home, even though (as predicted) it cleared up half an hour later. On the last day Jacqueline Mitton spoke about stars, their evolution.

Then what I considered as the fitting climax: Dr. Mitton spoke about the Universe as a whole, and as always in cosmological discussions it was very interesting. And as with all cosmological discussions, everybody left none the wiser, baffled by fourth dimensions, curved space, and everywhere being the same place, matter appearing from nowhere, and disappearing equally mysteriously down black holes.

After lunch we all went home after a very interesting weekend.

OASI MEETING on October 5th was very good for the first one of its kind organised by us. George Cubbisspoke on the evolution of stars, or rather spoke on it for half the time, and spoke on many other things in the other half of the time, but it was all very interesting!!!

Wed Oct 17th was a joint meeting of the Institute of Electric and Radio Engineers with Dr. R.S. Booth from Jodrell Bank spoke on Radio Astronomy. This came too late to be mentioned in the October newsletter, but was mentioned at the Oct 5th OASI Meeting.

KEEP LOOKING AT THE EVENING STAR NEWSPAPER especially at "Star Man's Diary", and on Saturdays at the "Youth and Adult Activities" and "Ipswich Events" which we will be mentioned in every Saturday. Bob Malsters writes articles about society meetings and astronomy in Star Man's diary every now and then or elsewhere in the paper occasionally. Every Saturday Club Nights and Meetings are advertised in the "Ipswich Events" column.

LAST MONTH there was a shortage of newsletters. Consequently, some people did not get any. Those who sent me stamped addressed envelopes did get theirs of course, because I always post them off as soon as the newsletters are printed (it is so easy to pop them into an envelope and then into a box). This is a subtle hint!!!!

COMET KOHOUTEK When I visited the Cambridge Institute of astronomy on October 3rd, Dr. Simon Mitton told me that a couple of days earlier they had recovered Comet Kohoutek. It was close to its predicted position, and was about 9th magnitude, slightly greater than predicted, promising a spectacular display this winter.

METEORS Thanks to Percy Fulcher for reporting this meteor:- Monday 24th September, at 18h56m U.T. in the north at a low elevation, travelling to the horizon at an angle of 30° from the east, lasting over three seconds, perhaps as much as 8 seconds. Slight green colour, with a reddish tail. Very bright, much brighter than Jupiter.

Thanks to M. Haxell for the following observation:-
First magnitude meteor seen at 21h36m U.T. Sunday 23rd September.

If you see a meteor which is bright, note down:- where in the sky you saw it, which direction it was going, and roughly how bright it was, compare its brightness with the planets and Moon. Saying it is as bright as a "pylon light" or jet navigation lights" is meaningless, they could be any brightness.

MEMBERSHIP MATTERS:-

We would like to welcome these new members:-

Mr.M.J.Regan, [redacted], Northwood, Middlesex.!!!
 Tony Jones, [redacted], Ipswich, IP2 9TB.
 Mr.M.Haxell, [redacted], Dovercourt, Essex.
 Mrs.A.M.Bulls, [redacted], Bxsmford Rd., Ipswich.
 Mr.F.J.Steward, [redacted], Ipswich.
 Mr.G.Brewster, [redacted], Ipswich.
 Mr.D.Barnard, [redacted], Ipswich., owner of # "reflector."

Hooray!!!! The above recruits bring our membership up to 99, so by now we should have at least the magic 100 (one hundred) members. The society has come a long way since a handful of friends first met in 1967.

There is a member living near you. If you wish to know who lives near you, contact me. There are probably more members living near to you than you realise.

Here is ~~xx~~ a reminder that subscriptions for 1974 are due on January 1st 1974, which is not far away. You will be posted a reminder later reminding you of this, and an invitation to the Annual General Meeting which will take place in the first week of 1974. Subscription rates for 1974 will be:- Family Membership: £ . p Adult:-£1. p Junior member (under 18 years) £ . p.

Also, I would like to say to new members and all other members, especially members outside the borough of Ipswich, could you please send me some stamped addressed envelopes to enable me to distribute the newsletters more easily; I do not like having to use up society funds for this.

SPACE SHOTS Skylab-2 returned after a very successful mission, accumulating some 77,000 photographs, many of the Sun and Earth revealing much new information on the Sun and the resources of the Earth.

Skylab itself is now returning to our skies. I receive BAA prediction for Skylab weekly; if you would like these predictions, either telephone me or send me a stamped addressed envelope. Occasionally predictions may be published in the "Evening Star" newspaper. The Skylab-3 mission is due to start on November 14th, and return to Earth in January. It is possible that the mission may be delayed and/or extended to allow it to cover the period of time when Comet Kohoutek will reach greatest brilliancy in Early January.

On November 3rd Mariner-10 Venus Mercury was scheduled for launch. During its journey towards Venus & Mercury it will monitor interplanetary space conditions which will help account for the activities of Comet Kohoutek. It is scheduled to reach Venus in 1974 February, and Mercury in 1974 March; when it reaches Mercury, our knowledge of the planet will be increased infinitely overnight by just a few dozen photographs, which will show more than the entire amount of data amassed about the planet since astronomy began.

LATE NEWS ON KOHOUTEK:- At last instead of humming and hawing I can give you some firm data on Kohoutek's Comet:- recovered on September 23rd by Seki, a famous Japanese cometary observer. It was then magnitude 11; this suggests a maximum brilliancy of magnitude -4.3. However, if it behaves like the Arend-Rolan Comet of 1957 it will become mag -2 only, but will have a maximum tail length of 21⁰!! By the end of the month it should be visible to the unaided eye. On November 22nd it will be in Corvus, very close to a seventh magnitude star (1" separation) at RA 12h47.1m Dec-15⁰37'.
 Nov 28th, .28' from 7th mag star at RA 13h19.1m Dec-18⁰29'.
 Dec 2nd, close to 7th mag star in Virgo. It will be best visible early January.

WANTED:-

One clock, any sort, any size or description for use in the observatory. If you have an unwanted clock, please contact me, Roy, or another committee member as soon as possible. ALSO one kettle must not be electric.

If you have a non electric kettle and/or any unwanted clock, please contact the committee as soon as possible.

Also: pieces of carpet are still wanted, any carpet unwanted please let us have it up at the observatory.

TUESDAY NOVEMBER 13th (day before Mark & Annes' wedding) there will be a "Social Night" at Geoffrey Colliers house in Chelmondoston near Ipswich. In During the evening in his back garden with small telescopes. Geoff's house & garden possess a perfectly dark night sky, no street lights for miles. Do come and bring your telescopes if you have any. Binoculars, books etc. These are very enjoyable gatherings. Geoff's telephone number is Woolverstone:241, telephone if you need directions or have any enquiries.



ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

PRESENTS

A TALK AND DISCUSSION ON

COMETS

AND THE COMET KOHOOTEK WHICH ARRIVES THIS WINTER

by

MR. MALCOLM HENDRIE F.R.A.S.

AT THE

FRIENDS MEETING HOUSE

39 FONNEREAU RD.

IPSWICH

ON FRIDAY 2ND NOVEMBER 1973

AT 8 P.M.

ADMISSION FREE

REFRESHMENTS AVAILABLE

SECRETARY: MR. M. HADDEN
33 CROFTON RD. IPSWICH TEL-78768

MINUTES OF THE COMMITTEE MEETING HELD ON

8th October, 1973.

Present: R.M. Cheesman (Chairman) H. Hadden (Secretary) G. Collier (treasurer)
M. Stow, D. Bearcroft, C. Radley

The minutes of the previous meeting were read and agreed.

Matters Arising.

Junior Astronomical Society Meeting.

The Committee confirmed its approval for the above Society and suggested that it be held either on 23rd February, 1974 or 2nd March, 1974.. The committee thought that there were too many disadvantages in using Orwell Park School for the meeting and it was agreed that we should hire the Friends Meeting House for the meeting.

Lunar Section Meeting of the B.A.A.

The committee agreed here also that the Friends Meeting House should be hired for this meeting any any members of the B.A.A. who wished to go to the Observatory after the meeting would be invited to go as an organised party.

Lectures.

The Treasurer reported that the first lecture had after taking into account donations received from the people who attended it had cost the Society approx £4. It was noted that most comments regarding the lecture had been favourable and the number attending was about fifty people. Donations collected at the door only amounted to about 90p. and this was attributed to the fact that a larger proportion of the people attending were members from our Society and as such did not feel obliged to contribute. It was suggested that future meeting should be held with a longer interval between them (approx 6 weeks). Arrangements were also agreed for the next lecture on 2nd November, 1973.

Outings.

C. Radley suggested that during the early part of next year we should organise a trip to Cambridge to see the radio and optical observatories. C. Radley said that he would try to arrange such a trip.

Lease on the Observatory.

The Chairman reported that he had heard from Mr. C. Shute who had contacted the board of Governors of the School and was waiting to hear from them with regard to seeing them and putting our case to them so that a long term lease could be entered into.

Repairs to the Observatory.

The Chairman reported that at the lecture held on the 5th October he had been approached by one of the people attending the lecture regarding the repairs to the dome wheels and was making arrangements to meet two engineers at the Observatory to get their expert opinion on the condition of the observatory dome.

Club Nights.

The committee felt that now the telescope was in good condition that more serious work should be undertaken on the club nights whenever possible and what aspect of astronomy which was undertaken should be left to the nights director concerned.

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

Next meeting 12th November, 1973

CLUB NIGHTS NOVEMBER, 1973.

MONDAYS.

from 8p.m.

Directors: K. Harris, [REDACTED], Ipswich.
Phone Ipswich [REDACTED]
T. Jay, [REDACTED], Elmsett, Ipswich,
Phone Offton [REDACTED].

November 12th
" 26th
December 10th

TUESDAYS:

from 8p.m.

Director: D. Bearcroft, [REDACTED]. Ipswich
Phone Ipswich [REDACTED]

November 13th
" 27th

TUESDAYS:

from 8p.m.

Directors: G. Collier, [REDACTED] Church Street,
Chelmondiston, Phone Woolverstone [REDACTED]
" A. Farthing, [REDACTED], Witlesham

November 6th
" 20th
December 4th.

WEDNESDAYS:

from 7p.m.

Director: R.M. Cheesman, [REDACTED], Ipswich.

November 7th
" 21st
December 5th

from 8.30p.m.

November 14th
" 28th

FRIDAYS.

from 8p.m.

Directors: M. Stow, [REDACTED], Ipswich
and R. Hazlewood, [REDACTED], Ipswich
Phone Ipswich [REDACTED]

November 9th
" 23rd
December 12th

SATURDAY.

10th November.

from 9a.m. to 2p.m.

Director: R.M. Cheesman.

Special meeting to observe transit of Mercury over Sun.