

Members of the OASI visited the Norwich Astro Soc. lecture on  
exploration, Saturday Sept 16<sup>th</sup>.

Below is a report on the Open Day. A list of Displays are below

TELESCOPES

- 1) 2" refractor by Jonathan Cooley (2 1/2" refrac" by Alan & John Cox
- 2) 2 1/2" refractor by Charles Radley
- 3) 2 1/2" refractor by Roy M. Cheesman. (6 1/2" refractor by Mr. C.E. Durrant
- 7) Spectroscope by Felixstowe High School

- P/ Photographs:-
- 1) Moon, Saturn & Stars by owner of Chelmsford amberlite
  - 2) Excellent set of photographs including Zodiacal light, Mars, Saturn, Stars, and astronomical equipment, contributed by Mr. Maurice Gavin of Ewell, Surrey.
  - 3) Norwich Observatory, Miscellaneous pictures, by Charles Radley

FILMS were shown in the main hall of Orwell Park School, including:-

- APOLLO-15 A RIDE ON THE MOON
- ORWELL OBSERVATORY by Anglia T.V.
- Miscellaneous astronomical slides.

There were two film shows, some 40 people watched the first show, and 150 people saw the second.

A very large number of people attended the Open Day, which was advertised with posters, in the Newspaper, and on the Radio. Total takings reached over £47, but expenses are yet to be taken out of that sum.

There were photostats of numerous documents concerned with the history of the telescope displayed on the walls of the Club Room.

Mr. D.E. Collinson who used the telescope in the 1930's attended the Open Day, with his wife.

During the evening, the telescope was sighted on to Jupiter, then when Jupiter set, it was sighted on to Mizar/Alcor, and Vega, and generally pointed at star fields.

Our thanks are due to Mr. Roy Cheesman, Mr. David Bearcroft, Mr. John Easty the ladies serving refreshments, the helpers and especially Mr. Bell for his permission to use the various rooms of the school. Without those mentioned, the Open Day would not have been possible.

LUNAR SECTION:-

There will be sessions using the telescope on October 11<sup>th</sup> & 18<sup>th</sup> in the evenings after a sunset 7.30pm. The sessions will be held even if the Moon is not visible, supervised by Mr. Roy M. Cheesman of [redacted]. Enquiries should be made to Mr. D. Bearcroft, tel Ips [redacted], who conducts observing sessions on alternate Thursdays.

Please add these Societies to your list in the last Journal.

GLACTON ASTRONOMICAL SOCIETY, Secretary Mr. C. Hashell, [redacted], Clacton-on-Sea, Essex, CO15-3SS, telephone Clacton [redacted], meetings held on the first Thursday of each month.

COLCHESTER ASTRONOMICAL SOCIETY, Secretary Mr. S. Hamilton, [redacted], Colchester Essex, telephone Colchester [redacted].

I HOPE THAT AS MANY PEOPLE AS POSSIBLE CAN COME ON OUR COACH TRIP TO NORWICH ON NOVEMBER 18<sup>th</sup>.

Parties from the Norwich, Clacton & Colchester astronomical societies attended our Open Day.

Best Wishes to all concerned. C. Radley



"What's up?" The Planets in October:-

**MERCURY:** is too close to the Sun for observation.  
**VENUS** is a morning star in the constellation of LEO. It is becoming less prominent. Magnitude is  $-3.7$  at the start of the month, fading to  $-3.5$  by the end. Through a telescope with a coloured filter preferably, or else when viewed when the sky is reasonably bright, but with Venus still visible, the phase of Venus is visible as Gibbous (i.e. between half and complete), full, between phases  $0.5$  &  $1.0$ . On October 4th, Venus is  $0.3^\circ$  South of Regulus (the brightest star of LEO) at 23hrs G.M.T and will be quite close when it rises from Great Britain on early morning of 5th October. Venus rises at 04hrs 50min G.M.T. at the start, & 03h20m at the end of Oct. It becomes invisible shortly after sunrise due to glare.

**MARS:** is too far from the Earth to be viewed this month.

**JUPITER:** is an evening star, not very well visible however, being very low above the horizon when the sky darkens. Fading from mag  $-1.7$  to  $-1.6$  this month, it sets from 21h15m G.M.T., at the start, and 19h30m at the end.

**SATURN:** reaches its post-conjunction stationary point in the sky on 2nd October, and moves retrograde until to the end of the year. It is in the constellation of ~~Capricornus~~ Taurus, & is well placed for observers in the northern hemisphere as time goes on. The rings are wide open, and the south pole is visible. He rises at 20h40m G.M.T. at the start of October, and at 18h30m at the end. It is brightening from mag  $+0.2$  to  $+0.0$  by the end. The biggest of Saturn's moons, or natural satellites, is visible with telescopes of about 2 1/2 inches, 3.0 or larger, at its elongations from Saturn which occur on the 2nd, & 20th when it will be to the right (in a normal inverting telescope) or east (following side of the planet. Also on 14th & 30th when to the left (in 1st tel.) west (preceding) side of the planet, in each case it will be seen at a distance of a few diameters of Saturn's rings ~~xxxxxx~~ from the centre of the planet. The 2nd, 13th, 25th, & 10th are the worst times to search ~~for~~ for this biggest moon, namely Titan. With luck, four satellites of Saturn can be seen in a 4" refractor or 6" reflect

**THE MOON Phases:** Last quarter occurred on 29th Sept. New Moon occurs on Oct 7th, 03h00m. First quarter on 15 Oct, at 12h55m. Full Moon occurs on 22 Oct, 13h25m. Last quarter again, ~~xxxxxx~~ occurs on 29 Oct at 04h41m. This month there are four good opportunities to observe the southern limb (edge) of the Moon.

- 1) 22nd Oct, draw/photograph South limb; Moon then near ~~xxxxxx~~ horizon which will be on 23 Oct at 12h G.M.T. It will also be full moon providing good illumination in that region. Southern limb will be exposed by  $6.5^\circ$  Selenographic Latitude at 09h G.M.T. Oct. It will therefore be useful to draw/phot southern limb on evenings of 21, 22 & 23 Oct.
- 2) 29 October, West limb exposed by  $4^\circ$  Lat, at around 16h40m. ~~xxxx~~ Moon at Last Quarter, therefore, west limb illuminated, East invisible.
- 3) Oct 17, East limb exposed  $7.4^\circ$
- 4) Oct 2, West limb exposed  $6.2^\circ$ . Moon only visible for a few hours before dawn.

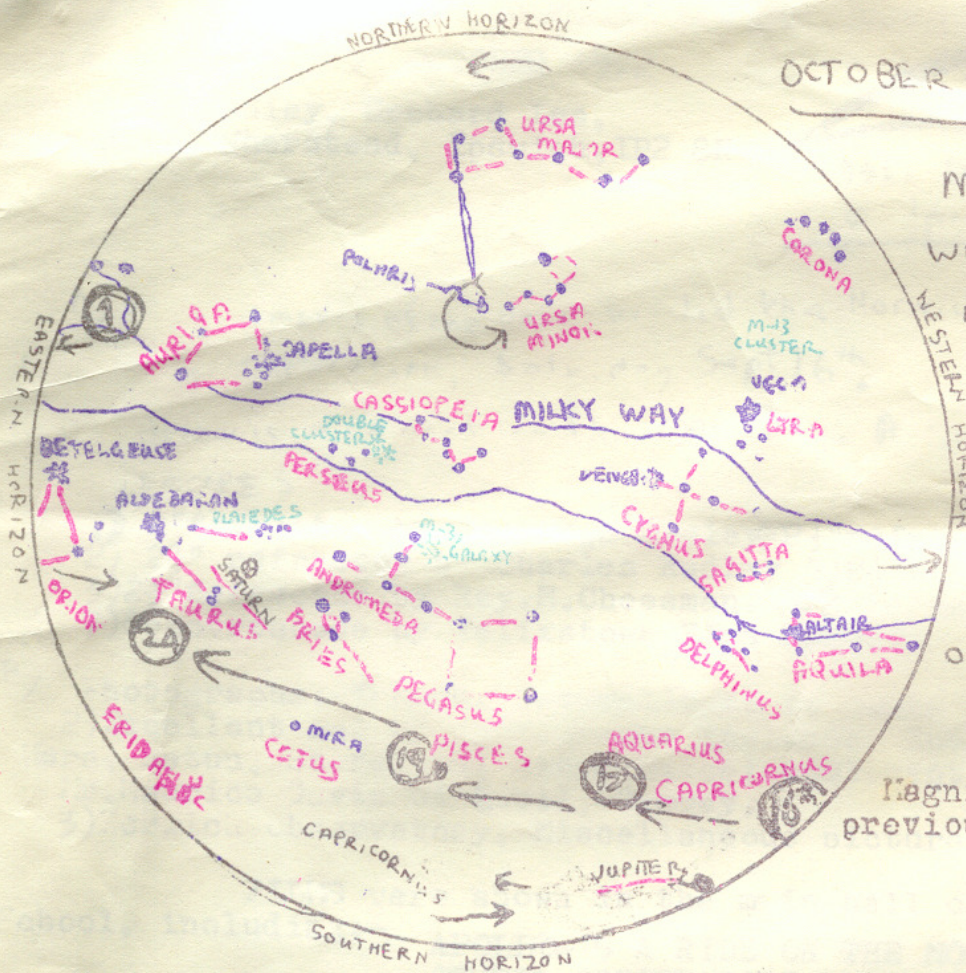
**VERY PROMINENT METEOR SHOWER**

An extremely rich meteor shower is expected on Oct 8th. It should be the richest since 1946. It is the Draconid shower. Rates of as much as 5,000 meteors per hour are expected. The meteor ~~xxxxxx~~ stream from which the shower comes will be closest to the north at  $17^\circ$  G.M.T. on October 8th, when the maximum rate can be expected. Unfortunately the G.S. will miss the best part of the display, which will be seen best from the East Europe, USSR, Middle East. The total limits of the shower will be from 6 to 10 October. A watch should be kept from sunset onwards on the 8th October outside in the garden of your house. Just think of the fantastic ~~xxxx~~ rate of more than 1 meteor per second; what's the betting it will be cloudy?

The Norwich Astronomical Society ~~xxx~~ have another series of public meetings & lectures this autumn, winter & next spring. Held at the Spinney, Earlham Five Ways, Norwich, on the by-pass near the University of East Anglia. It is the community centre. Coffee & refreshments available. Plenty of parking space. 509 & 510 buses go past the door. Held at 7.30 p.m. on Saturdays.

October 21st "Climate ~~xxxxxx~~ in Early Civilised Times." Illustrated talk by Prof Hugh Lamb ~~xxxx~~





OCTOBER STAR MAPS

MAP V A

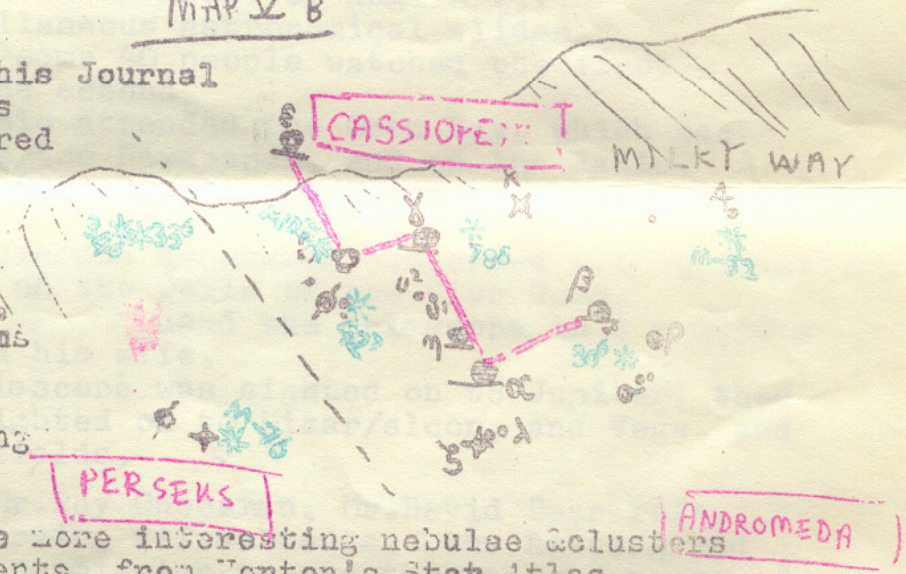
WHOLE SKY AS SEEN AT:—  
 MIDNIGHT AT START OF MONTH  
 10 PM GMT MIDDLE OF MONTH  
 10 PM GMT END OF MONTH

THE POSITION OF THE  
 MOON IS SHOWN FOR  
 THE FOLLOWING DAYS  
 OCTOBER 1<sup>st</sup>, 6<sup>th</sup>, 17<sup>th</sup>, 19<sup>th</sup>, 24<sup>th</sup>

Magnitude scheme as in  
 previous Journals.

MAP V B

The star maps included in this Journal are rather sparse. This is because I have already covered the most interesting (to me) regions of the sky in previous Journals, except for Orion & Taurus, which will be in the next edition, and the Spring Constellations which will be next year. CASSIOPEIA is a fruitful constellation, worth sweeping with binoculars, or a low power, as it is situated in the Milky Way. Some of the more interesting nebulae & clusters are listed below, with comments, from Norton's Star Atlas.



- 1) Sword-Handle (34<sup>6</sup> 233<sup>6</sup>) double cluster in Perseus, is the most picturesque object on this map. Each is about 45' across, there is a fine ruby star near the centre of 34<sup>6</sup>. Gamma (γ) and Delta (δ) Cassiopeiae form a line, along the direction of which (and twice the length of which) is the Double-cluster, approximately.
- 2) M-76 in Perseus, is a double nebula, see last month's Journal.
- 3) M-105, between Delta (δ) and Epsilon (ε) Cassiopeiae. It is a beautiful field, 1° above and left (following) of Delta (δ) contains a red star.
- 4) I-52. Irregular cluster, 20' 20' across, containing orange star.
- 5) 78, cluster, somewhat W shaped, halfway from Gamma (γ) to Kappa (κ).
- 6) 317 close to M-105. Open Cluster.
- 7) 42, a condensed cluster of moderately bright stars, attending δ (phi), cluster further than δ from Earth, 18' across.
- 8) 30, large cluster of very faint stars.
- 9) I-34, a fine loose cluster, well worth looking at, contains double star.