# OURNAL OF THE ORWELL ASTRONOMICAL SOCIETY (IPSWICH) Mr. P. Burt, . Ipswich IP1 6PP phone Ipswich : Mr. R.M. Cheesman. WEST HANNINGFIELD, Chelmsford, Essex. CM2 8LQ , Ipswich iter: Mr. A.J. Smith, phone Ipswich SI

The Orwell Park 10 inch Astronomical Telescope at Nacton, near Ipswich.

#### CRWELL PARK THE NICHT SEEN FROM DURING JANUARY.

by Paul Burt.

Capella, the yellow main star of Auriga dominates the zenith this month during late evening. The string of faint stars forming a straight line between Capella and Polaris to the north is Camelopardalis, and running at right-angles from this constellation eastwards down to Leo is another line of faint stars forming Lynx. The southern sky is shining in it's full winter glory with all the trightest zodiac constellations on show (from east to west: - Leo, Cancer, Gemini. Taurus and Aries). On the meridian during late evening Orion outshines all others, and above the souther horizon Canis Major, with Sirius, is fully visible, as is Lepus, the quadrilateral shape directly below Orion.

#### THE SUN

Surrise is at 0800 hours at the beginning of the morth. changing to O7hours 50 minutes at month-end. Sunset charges from 15h 50m to 16h 40m.

#### THE MOON - PHASES

First Quarter	03d	04h	45m	Last Quarter	16ċ	23h	Om
Full Moon	09d	19h	53m	New Moon	25c	04h	:50

#### Occultations

Star	Phase	Mag.	deys	Time hours	nine,
<del>**</del> 364	D	4.3	5	00	23.0
653	D	4.8	7	90	33.6
798	D	6.4	$\bar{\tau}$	21	20.3
1418	R	5.9	11	23	17.6

D = disappearance R = reappearance. Stars listed according to Zodiacal Catalog (EC) numbers.

> \*\* denotes time is correct for laborate and longitude of Greenwich.

#### ECLIPSE

There will be a total eclipse of the Moon on January 9th (the night of the Society's Annual General Meeting), visible generally in Europe and Africa, most of Asia and Australia.

Moon enters penumbra	17h 15m	leaves	22h 37m
Moon enters umbra	16h 14m	<b>Leaves</b>	21h 38m
Total colipse begins	19h 17m	Fnds	20h 35m
Middle of eclipse	19h 56m		_

#### THE PLANETS:

Mercury is an evening object reaching greatest elongation of 19° on the 16th, when it will be setting nearly 2 hours after the Sun.

Venus is in inferior conjunction on the 21st, before which it will be an evening object, rapidly closing in on the Sun.

Mars will be rising before mid-night at mag. +0.9, increasing to +0.5 at month-end in Virgo.

Jupiter is in Libra, at mag. -1.5, rising at around 0200 hours.

Saturn is in Virgo, rising at around mid-night, at mag. +0.9

Scurce: B.A.A. Handbook 1982, all times are U.T

#### METEGR NOTES: by David Barnard.

The Meteor Count held on December 12th to observe the Geminids Shower was not very successful. On one of the coldest nights of the century with temperatures plummeting to -30°C in places, we only managed two meteors, one sporadic and one shower, mainly due to the near full Mon, compared with last year's total of 231.

This month we have the Quadrantids Shower. This has a very sharp maximum on Sunday January 3rd at 11p.m. This shower has blue faint meteors. We expect a ZPR of over 100. Radiant 15hours 28 minutes. Dec. +50

WE WILL BE HOLDING A METEOR COUNT TO OFSERVE THIS SHOWER ON SUNDAY 3rd JANUARY. All members and friends are welcome to come along for a few hours to observe this shower. Meet OUTSIDE the 'Levington Chip' public house at 8p.m. whatever the weather.

## AURCRA SECTION: - Trip to Scotland No. 3 (3rd time lucky!:

At the time of writing we are thinking of investing in snowchains! The trip is DEFINITELY ON. We will probably be travelling by car, leaving Ipswich on Friday January 15th 1982 for an all night drive spending a west around the northern half of Scotland staying in hotels. A full report of the trip plus the Aurora sightings wil be in the February Journal hopefully.

David Barnard.

#### Occultations Section. Graze on January 4th 1982.

Alan Smith, Ipswich, telephone Ipswich is currently drawing out the track of his event. It looks like we shall have to be somewhere ner Cromer in Norfolk to see this event. The graze is arend 2045hours U.T. and the star's magnitude is 7.4. If yu are interested in coming along to observe this event please contact Alan Smith.

#### FIREBALL CAMERA

The Society's fireball camera run by Alan Smith has picked up it's first fireball backed by visual sighting The fireball occurred on Wednesday 25th November at 2032hours. If anyone else saw the fireball please contact Alan Smith or myself. It was fairly low in the north and probably of around magnitude minus 5.

David Barnard.

### VARIABLE STAR OBSER/ATIONS by Mike Nicholis.

This month's light curve on page 5 is that of R Scruti from July to November this year. This is believed to be a supergiant pulsating star of the RV Tauri type. The period and light range are semi-regular in nature. The most notable characteristic of this class is the alternate deed and shallow minima. In the Journal of March 1981, what looked like a shallow minimum was shown. This time, however, we weem to have one of the deep minima.

Observations were made using 10x50 binoculars for most of the time, but the 8" reflector was used for magnitudes below about 7.

#### ECIETY NEWS:

AG.M. The Annual General Meeting of our Society takes place on January 9th 1982 starting at 8p.m. in the Lirary of Orwell Park School.

#### SUSCRIPTIONS FOR 1982.

All Membership Subscriptions for our Society become du for 1982 on the 1st January. If you wish to renew yor subscription please send them direct to

Mr. M. Barriskill,

Membership Secretary, O.A.S.I.

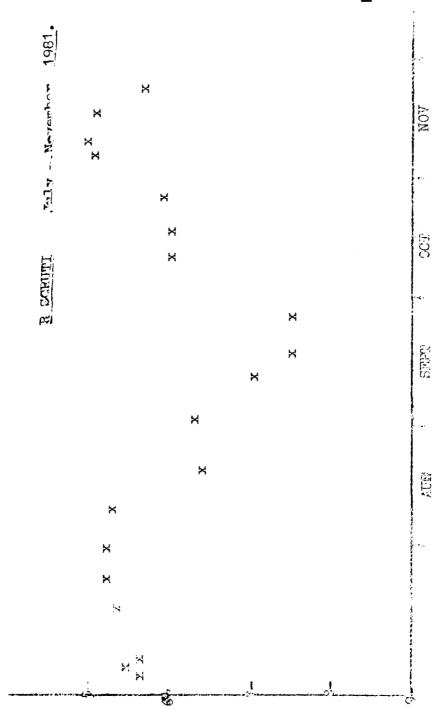
Ipswich.

All cheques should be made out to:
Orwell Astronomical Society (Ipswich)

#### LECTURE:

We have arranged with Mr. G.E. Curtis to give us a talk on Nevee, Supernovae and stella Evolution at the Friends Meeting House, Fonnereau Road, lipswich on Friday 29th January, 1982 starting at Sp.m.

Mr. Curtis has given our Society talks twice before, in fact he did our first lecture, and his lectures are not to be missed! Admission is free and everybody is welcome to come along.



The Deadline for items for inclusion in the February's Jurnal is Wednesday 20th January. All items should be sent to:

Mr. R.M. Cheesman.

WEST HANNINGFIELD, Chelmsford, Essex. CM2 8LQ.

#### ASTRONOMY FOR BECTANERS:

On Friday January 13th starting at 7.30p.m. in the Observatory we have our monthly evening for beginners in astronomy. This month's talk is given by our Secretary Mr. Ray Gooding and is entitled 'The History of Astronomy'. Members are invited to come along to this meeting and will be admitted free but non-members a charge of 20p will be made.

#### SO:- Do not forget:

- 1. Meteer Count on the 3rd (Sunday) at \$p.m. at the Levington Ship
- 2, A.G.M. starting at 8p.m. in the Library of Orwell Park School on Saturday 9th.
- 3. Astronomy for beginners on Friday 15th at 7.30p.m. in the Observatory.
- 4. The time at The Friends Meeting Clouse. Formereau Rd. given by Mr. G. Cursis on Fichlay 29th starting at Sp.m.

ORWELL ASTRONOMICAL SOCIETY (IPSWICH)
Program for January, 1982.

At the Observatory, Orwell Park, Nacton

TUESAYS from 7p.m. Solar, Bunar & Planetary Sections Directors. Mr. J. Hood & Mr. J. Ranson

5th 12th 19th & 26th

WEDNESDAYS from 8p.m. Nebula & Fiant Objects Section Directors. Mr. D. Payne & Mr. M. Cook

6th 10th 20th & 27th

FRIDAYS from 8p.m. Variable Stars Section
Directors Mr. M. Nicholls & Mr. R. Hodgkiss
January 8th.

FRIDAYS from 7.30p.m. Astronomy for Beginners.

SATURDAY 9th January, 1982 at 8p.m. A.G.M. in the Library

#### OTHER MEETINGS:

FRIDAY 15th January, Ipswich to Durness, Scotland Aurera Expedition.

SUNDAY Meteor Section, Director Mr. D. Barmard.
Sunday 3rd January, 8p.m. Meet CUTSIDE
the Levington Ship public Bouse.

FRIDAY 29th Marmany, 8p.m. at The Friends Medding House, Franchean Road, Ipswich, Inches by Mr. C. Curtis on 'NOVAE, SUPERNOVAE and STELLA EVOLUTION