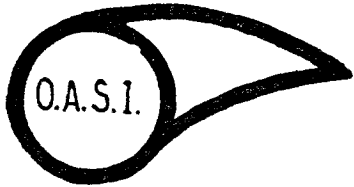


AUGUST 1984



The Orwell Park Observatory 10 inch Astronomical Telescope at Nacton near Ipswich

1. Draw Tickets

By now every society member should have received a batch of draw tickets to sell. All sold and unsold tickets, together with the money should be returned to David Barnard by the 22nd of September. If anyone requires additional tickets, please contact David.

2. Open Weekend

Our annual fund raising Open Weekend will be held from 28th September, to 1st October. As many members as possible will be required to attend on the four nights.

YOUR HELP IS REQUIRED

Please contact Eric Sims or any other committee member. Several portable telescopes will be required for use on the balconies. Again members' help is required; please contact any committee member. Full details on back page.

Constellations (all times G.M.T.)

The Summer Constellations are still well placed for observation. The Autumn Constellations are beginning to appear over the eastern horizon.

Sun Rises approx. between 04.20 to 05.20

Sets approx. between 20.00 to 19.00

Moon 4th 11th 19th 26th

Occultations

3rd	ZC 2070	mag. 6.7	D	20hr. 53.3m
4th	2192	6.2	D	20hr. 38.4m
6th	2469	6.3	D	20hr. 28.3m
23rd	1030	3.2	R	1hr. 35.6m

Mercury Greatest eastern elongation on the 1st (27°)

Inferior conjunction on the 28th.

Venus Sets about 1 hour after sunset.

Mars Sets about 22.00 in mid month.

Jupiter Sets about midnight in mid month.

Saturn Sets about 21.30 in mid month.

Uranus Sets about 23.30 in mid month.

Neptune Sets about midnight in mid month.

R. Gooding.

As a service to members, the society subscribes to a number of astronomical publications. Current publications are available for reading at the observatory, with older ones being available on loan.

Publications the Society receives:

1. British Astronomical Association Journals and circulars.
2. Junior Astronomical Society Journals and circulars.
3. The 'Astronomer' and circulars.
4. The Federation of Astronomical Societies' Journals.
5. 'Sky and Telescope'
6. 'Astronomy'

Copies of 'New Scientist' and 'Scientific American' are occasionally available also.

JOURNAL ARTICLES

This newsletter is intended as a source of information and communication between society members. Unfortunately, in order to communicate and impart relevant information, a small band of scribes have to sit down and stare at a blank piece of paper (except those with a blank V.D.U. screen) before beginning the attack with pen or typewriter. Inspiration for articles is often slow in coming, but between 'doodles', paper darts and black coffee, printing dead-lines are met. A newsletter has now been produced monthly, without a break, since February 1972. As you read this you will be holding the 151st issue.

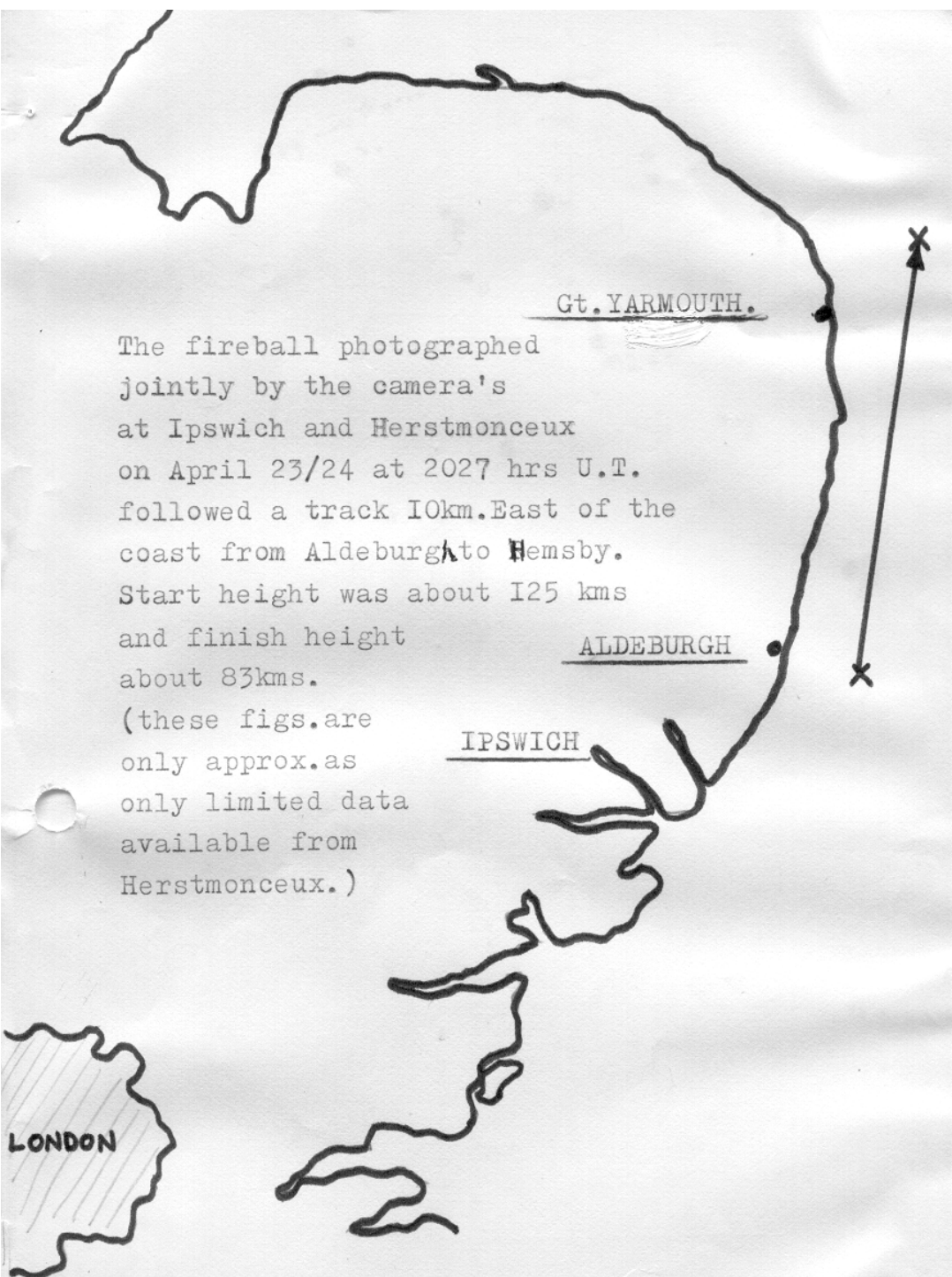
This newsletter is available for all members to contribute to, so to any budding author a blank page can always be found for you to fill. Articles or letters can be on virtually any subject, from serious observations to cartoons.

R. Gooding.

During the warm nights of August Cygnus the Swan is gliding overhead. Lying within the arms of the Milky Way this constellation contains many rich star fields and nebulous objects and is an area of sky well worth searching with binoculars on a clear dark evening. Despite the rich stellar background Cygnus only contains two objects listed in the Messier Catalogue, these are M29 and M39, both objects are galactic clusters.

The cluster M29 contains about 20 stars of which about one dozen lie within the 8th to 9th magnitude range. They form a close knit group of roughly trapezoidal shape. Because it is in a particularly rich part of the Milky Way it can be easily over looked when searching with a telescope. The cluster lies about 1.7 degrees SSE of Gamma Cygni (the central star in the 'Northern Cross') and is most easily found with binoculars. Once identified against the stellar background it can be readily found in a small telescope. The cluster lies about 7200 light years away with a diameter of about 15 light years. This particular part of the Milky Way contains a considerable amount of interstellar dust and the cluster itself appears to contain dust about 1000 times greater than the average density within the galaxy. The dust lying between the cluster and the Solar System is estimated to give a reduction in apparent brightness of about three magnitudes and it would be quite a spectacular object if seen through 'clear' space.

The other Messier object, M39, is a large loose cluster over 1/2 degree across and is easily seen in binoculars. It contains about 30 stars and requires low power wide field eyepieces when observed in telescopes. The cluster is estimated to be about 800 light years away and has a diameter of about 7 light years.



The fireball photographed jointly by the camera's at Ipswich and Herstmonceux on April 23/24 at 2027 hrs U.T. followed a track 10km. East of the coast from Aldeburgh to Hemsby. Start height was about 125 kms and finish height about 83kms.

(these figs. are only approx. as only limited data available from Herstmonceux.)

Meteor Showers In August.

There are 5 showers active this month, plus one important one mentioned below these notes.

1) Capricornids.

Three radiants, of which the maximum was last month. Active well into August. Radiants 20hrs 44mins, -15° and 21hrs 00mins, -15° . Bright meteors. Expect about 3 meteors an hour. Moonlight interferes around middle of month.

2) Delta Aquarids.

Two radiants, one reaching maximum on Aug. 7th. Active until 20th. ZHR=10. Radiants 22hrs 35mins, -17° , and 23hrs 04mins, $+02^{\circ}$ (the latter has the maximum this month). Telescopically active. Rich in faint meteors. Telescopic observations needed.

3) Alpha Capricornids.

Maximum on 2nd, active until 25th. ZHR=8. Radiant 20hrs 36mins, -10° . Rich in yellow fireballs.

4) Iota Aquarids.

Max. on Aug. 6th. Active throughout the month. ZHR=8. Two radiants, 22hrs 12mins, -15° , & 22hrs 04mins, -06° . Telescopically active. Rich in faint meteors, and telescopic observations required.

5) Perseids.

Max. on Aug. 12.3. Active until 20th. ZHR=75. Radiant 03hrs 04mins, 58° . Moonlight interferes at maximum. Rates high in recent years. Observations required either side of maximum. Bright trained meteors.

One interesting minor shower which may show some activity is the Kappa Cygnids. This reaches max. on the 20th, (active between 18th & 22nd). Bright exploding fireballs.

Hal Povenmire, of Borlando, Florida, requests observations of the Upsilon Pegasids, active after 28th July max. on 12th (full moon!). He will publish any decent photos of this shower, & recommends 400ASA Tri X or HP5. Max. of five minute exposure (We will also publish any too!). Observations either side of maximum required. Contact Alan Smith for radiant & further details (IPS. ████████).

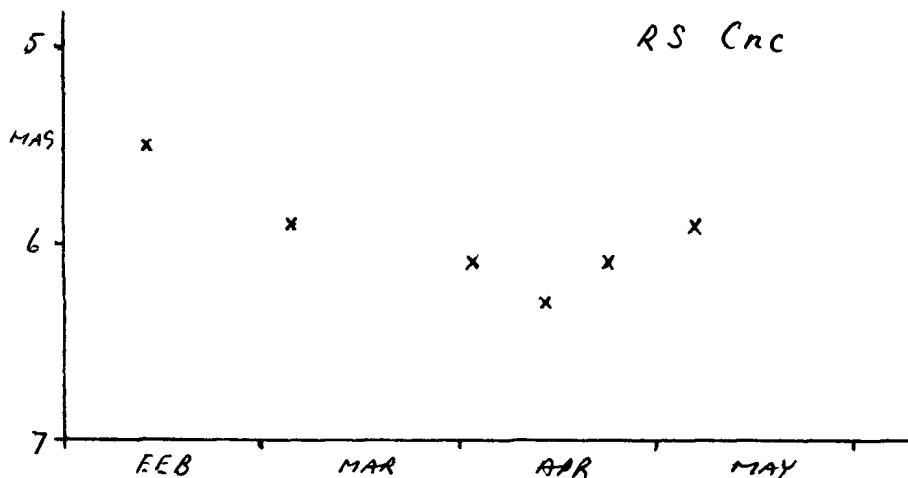
(David Barnard)

VARIABLE STAR OBSERVATIONS

by Mike Nicholls

The light curve shown below is that of RS Cancri from February to May this year. A member of the semi-regular class, this star has a period of about 120 days and a light range of from magnitude 5.5 to 7.0. This light curve shows what seems to be quite a distinct minimum. Unfortunately the observations were made over a short period of time, and no maximum is visible.

An easy star to locate because of its proximity to bright stars, observations were made using a pair of 10x50 binoculars.



PROGRAMME FOR JULY

MONDAYS from 8pm 6, 13, 20, 27	DOUBLE STAR & PLANETS SECTION Mr N Taylor [redacted], Farmlands Trimley Mr T Gillan [redacted], Felixstowe	Tel: Fel. [redacted] Tel: Fel. [redacted]
TUESDAYS from 7pm 7, 14, 21, 28	GENERAL OBSERVATION SECTION Mr N Gage, [redacted], Trimley Mr R Newman [redacted], Felixstowe	Tel: Fel. [redacted]
WEDNESDAYS from 8pm 1, 8, 15, 22, 29	NEBULEA & FAINT OBJECTS SECTION Mr M Cook, [redacted], Ipswich Mr D Payne, [redacted], Wickham Market.	Tel: Ips. [redacted] Tel: W.Mkt. [redacted]
FRIDAYS from 8pm 10, 24	VARIABLE STAR SECTION Mr R Gooding, [redacted], Ipswich Mr M Nicholls, [redacted], Capel St. Mary.	Tel: Ips. [redacted] Tel: Ips. [redacted]

1984 COMMITTEE

CHAIRMAN	D Payne	[redacted], Wickham Market, IP13 OSD	Work: [redacted] Home: [redacted]
VICE CHAIRMAN	R Cheesman	[redacted], Corringham, Essex SS17 9BU	Work: [redacted] Extn: [redacted]
SECRETARY	R Gooding	[redacted], Ipswich IP1 6AE	Work: [redacted] Home: [redacted]
TREASURER	M Nicholls	[redacted], Capel St. Mary, Ipswich, IP9 2EX	Work: [redacted] Home: [redacted]
MEMBERSHIP SEC.	M Barriskill	[redacted], Ipswich IP1 2EZ	Home: [redacted]
P.R.O.	D Barnard	[redacted], Ipswich, IP4 5PP	Home: [redacted] Work: [redacted]
MAINTENANCE	M Cook	[redacted], Ipswich, IP4 5QA	Home: [redacted] Work: [redacted]
FUNCTIONS	E Sims	[redacted], Ipswich, IP1 4HA	Home: [redacted]
LIBRARIAN	N Gage	[redacted], Trimley St Mary, IP11 9BY	Home: [redacted] Work: [redacted]