

DECEMBER 1987

1. ANNUAL GENERAL MEETING

8.00 p.m. January 9th 1988

All members are invited to attend the 1988 A.G.M. This will be held in the school library on Saturday 9th January, starting at 8.00 p.m.

2. 1988 Subscriptions

These are due on January 1st.

Rates are:-

Junior and O.A.P.	...	£4.00
Adult	£6.50
Family	£7.50

These rates remain unchanged from 1987.

Members wishing to have their newsletter by post, please add an additional £2.00 to cover the cost of stamps, envelopes and address labels.

All other newsletters will be left in the club room for collection.

3. 21st Anniversary Open Day

To be held on Saturday 9th July, 1988. As much help as possible will be required.

4. Computer Files

Members names and addresses will be held on computer file for Society use only, for printing newsletter address labels. If anyone objects to this please contact any committee member.

NIGHT SKY

(all times G.M.T.)

Sun Rises at approximately 8.10
Sets at approximately 15.50

Moon ○ 5th ◐ 13th ● 20th ◑ 27th

Mercury Superior conjunction on 23rd. Not observable this month.

Venus Sets about 2 hours after sun in mid month. Easily seen in western sky.

Mars Rises at about 04.30. Mag. 1.6.

Jupiter Sets at about 02.00 in mid month. Mag. -2.6

Saturn Not observable this month. Conjunction on 16th.

Uranus " " " " " on 19th

Neptune " " " " " on 29th.

CONSTRUCTION OF ORWELL PARK OBSERVATORY

First published in 'Engineering' October 2nd, 1874
PART 5

There is scarcely a detail connected with a large astronomical instrument which would not furnish the subject of an essay. One of the most important parts of an equatorial instrument is the driving clock. According to the ordinary method of German mounting the driving clock is bolted against the standard, and adds much to the inconvenience of the standard. In the case of the Orwell Park instrument, the driving clock is placed at some little distance from the instrument in a window recess, and the motion is communicated to the instrument by means of a strong horizontal spindle just above the floor; the driving weight of the clock descends alongside the central pier, and a small door has been made in the circular wall surrounding the pier below the observatory for the purpose of getting at the weight when required. The eye-pieces, micrometers, etc., need to be suited to the work for which the instrument is to be used, and are best left to the decision of the observer who has the permanent charge of the observatory. There is much difference of opinion concerning the observing chair which is best adapted for an equatorial. In most observatories the observing chair is carried by a frame which runs on a circular arc concentric with the instrument, and the chair is raised, lowered, or tilted by gearing, which the observer can work while sitting on the chair, so as to suit his position exactly to that of the eye-end of the telescope. Such an arrangement is rather too cumbersome and elaborate to suit practical observers, and it has further the disadvantage of being a good deal in the way of movement about the floor of the observatory. For the Orwell Park Observatory the writer designed a chair consisting of a small flight of steps; the chair runs upon castors and can be placed in any position; the steps are well padded both on seats and backs, and the observer by sitting on one or other of the steps can easily adjust his position so as to make any requisite observation. For the preservation of the instrument and observatory it is advisable to have the means of warming it when observations are not being carried on, and in the case of the Orwell Park Observatory this is managed by hot air admitted through gratings in the floor of the observatory. The transit instrument at Orwell Park is placed in a small turret alongside the equatorial room; the telescope is of 3" aperture. The astronomical clock was made by Dent; it is placed in a recess of the wall of the transit room, and is in the line of the two piers of the transit instrument, so as to be read equally well from one side or the other.

It is to be assumed that the establishment of a private observatory of high class is with a view to the pursuit of certain branches of useful scientific investigation, as well as for the enjoyment of its possessor. But in order to carry out effectually any long course of investigation, it will generally be found advisable to put the observatory in charge of a permanent assistant. There is no lack of subjects which may be usefully investigated - spectroscopic observations, the colours of stars, the careful and constant examination of certain double stars, and above all a good and accurate series of observations of the satellites of Jupiter, may all be mentioned as subjects of useful investigation well suited to an equatorial instrument. Such observations would not be of so exacting a nature as to hinder the use of the instrument for any casual observations, as, for instance, that of a comet or planet in any peculiar position, and they would greatly tend to the preservation of the instruments in good order, as also to the credit of the observatory at which they were carried out.

Wilfred Airy,



POSTERS, LETTER HEADINGS, VERSE CARTOONS ETC!
JOBS LARGE OR SMALL UNDERTAKEN!!

XWORD No 11

In reply to the request for articles for the newsletter I thought the following, remotely astronomical, story might be of interest to members:-

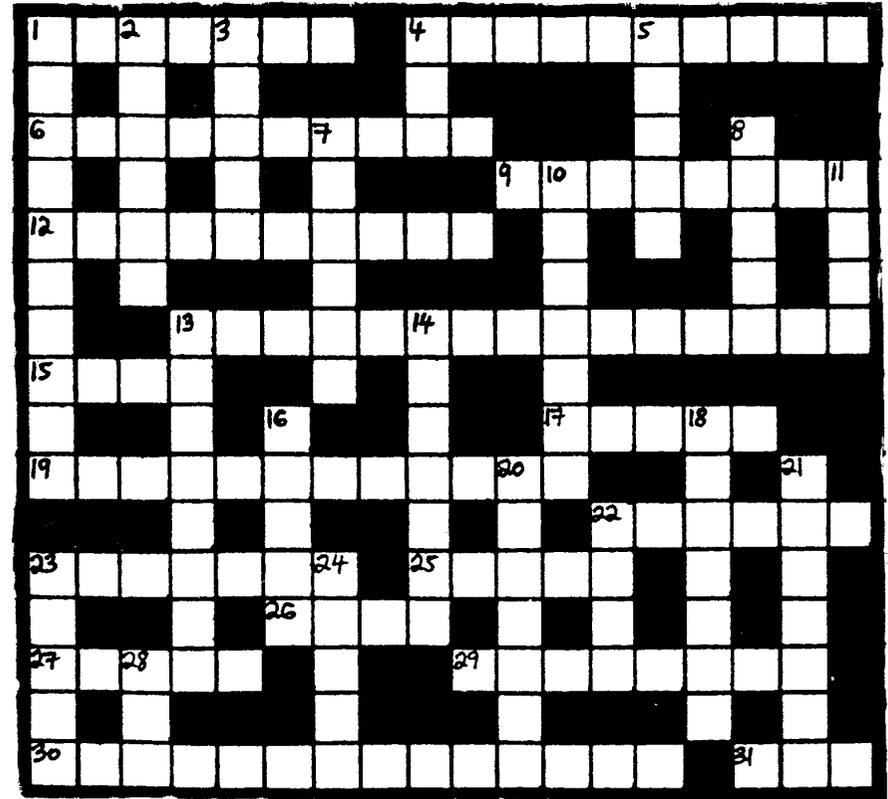
Whilst flying with Bomber Command during the war, on one occasion(I believe it was after an attack on Munich), our aircraft was approached by several orange balls of fire which I estimated at the time to be one to three feet in diameter. These glowing objects "flew" alongside our aircraft sometimes slowing up and then shooting away at high speed often returning to "fly" again on our wingtips and amongst the rest of the bomber stream until eventually all disappearing. Our crew were very mystified and came to the conclusion that they were some new type of German weapon.

On our return to base we reported this phenomena to the debriefing team but they appeared not to want to know and showed no interest!

Since the war it has been discovered that these balls of fire had also been seen by German and Japanese aircrews. They were also seen during the Korean war and were nicknamed "Foo fighters"

No satisfactory explanation has ever been given about these fireballs and I am still wondering!!

Vernon Wilkes DFC.



R.A. LOBBETT

Solution to crossword number 10

Across- 1 Selenography, 7 Ranger, 8 Saenger, 9 Street, 11 Luna, 12 Day, 13 Cusp, 14 West, 16 Volcanic, 18 Apogee, 19 Ebb

Down- 1 Saros, 2 Langrenus, 3 Oersted, 4 Romer, 5 Plagioclase, 6 Year, 10 Impact, 11 Lower, 15 TLP, 17 Ore

Across

- 1 Nasa's first series of spacecraft which started in 1958 (7)
- 4 A star's absolute brightness (10)
- 6 An optical defect in a lens (10)
- 9 Sun's apparent annual path (8)
- 12 Scientific field which has not yet acquired academic status but involves the search for extraterrestrial life (10)
- 13 About the 23rd of September (8,7)
- 15 Used to regulate amount of light entering an optical instrument (4)
- 17 Dark age Astronomers (5)
- 19 Beautiful open cluster visible to the naked eye (5,7)
- 22 Crow - constellation (6)
- 23 Largest planet with rings (7)
- 25 Point opposite the zenith on the celestial sphere (5)
- 26 Known number of planets to date (4)
- 27 The carpenter's square - constellation (5)
- 29 Minor planet 324 which was of magnitude 11.4 to 10.5 during September to December 1987 (8)
- 30 About June 22 (6,8)
- 31 Spot the colour (3)

Down

- 1 Alternative name for Minor planets (10)
- 2 Satellite of planet Uranus which was discovered by W. Herschel in 1787 (6)
- 3 Star within Cepheus which is closest to polaris (5)
- 4 Constellation with this zodiacal sign ♏ (3)
- 5 Elliptical, circular, parabolic or hyperbolic (5)
- 7 Latin name for the Earth (6)
- 8 Puppis constellation, is this part of Argo the ship (5)
- 10 One would require a photographic memory without these (7)
- 11 Southern cross constellation (4)
- 13 The big dipper is one because it is not a constellation in it's own right (8)
- 14 Planet discovered in 1846 by Galle (7)
- 16 This light originates from sunlight reflected from the Earth (5)
- 18 Astronomer who discovered a red dwarf star with the largest known proper motion (10 " per year) (7)
- 20 Point in sky from which a meteor swarm seems to emanate (7)
- 21 Fornax constellation (7)
- 22 Cancer constellation (4)
- 23 Magnitude 14 satellite of Saturn discovered in 1966 (5)
- 24 Four planets are thought to have them (5)
- 28 Sun is in this constellation between April & May (3)

COMET BRADFIELD - COORDINATES GIVEN FROM LINE
ON OASI MEMBER'S CHART AND MARKED DATES, NOT
ACTUAL PRIMARY LISTED EPHEMERIS:

871111	18 10	+4 ⁰ I.	Mag 5.6a	48min time =
	21 55	10		12 ⁰ /10 days.
1201	19 52	15		15 ⁰ /- - .
	11 20 58	21		17-18 ⁰ /- - .

Expected →
position at
same 'hours'
on 871115

⊙ 16
⊙ 17

(found on 871114 1800a (23⁰a
altit.) by taking 4
coordinates rec'd
at 1300 on 871114
verbally (ref to
yellow member OASI's
charts), using
Altair & 'outides'
to indicate bearing
to γ (& E) Aquilae
(9^h 15^m from 12^h 30^m
clock of Altair & outides)
then 'same distance' at
'2^h 15^m from this star
(γ Aquilae).

TO
RAQUILA

TO
ALTAIR,
20° APPX.
(FROM COMET
8711141830). AT

SERPENS
CAUDA

CONSTELLATION
BORDERS APPROX.
EPOCH 1950

OBSERVER: Roy Adams.

Instrument: 7x 50mm Binos.
Hand-held. Field diam 5.3°.

appx. SCALE 1° arc.

← NOT observed on 15th.
Expected about here.
Cloud.

NB: 8711171815. Some luminosity
still here but not
as bright as on
8711141830.

← 8711141830
POSITION
18h 25m,
+6.30
as found.
Mag 5.5
(when
rotated)
appx.

Predicted path,
approx.

COMET BRADFIELD, 1987.

871114:

LOCATION: BACK GARDEN,
16 FITZWILLIAM
CLOSE, IPSWICH.

CONDITIONS: HAZE &
HOUSELIGHTS GLARE.
(8 GENERAL)

NAKED EYE LIMIT: MAG 4
APPX. IN SKY REGION 20° alt.
AT 8711141830

↑
ZENITH
APPX.
at 8711141830

• Mag 5.5 appx.
(Norton)

OPHIUCHUS

RCA

(13° altit)
↑
* From
garden -
houses opposite.

CLOUD TO 4/10 appeared for
short while 1900. Comet reobserved in a just noticeably
advanced position in accordance with expected 1/20° per
hour movement, at 8711141935, descending below house roof. *

3

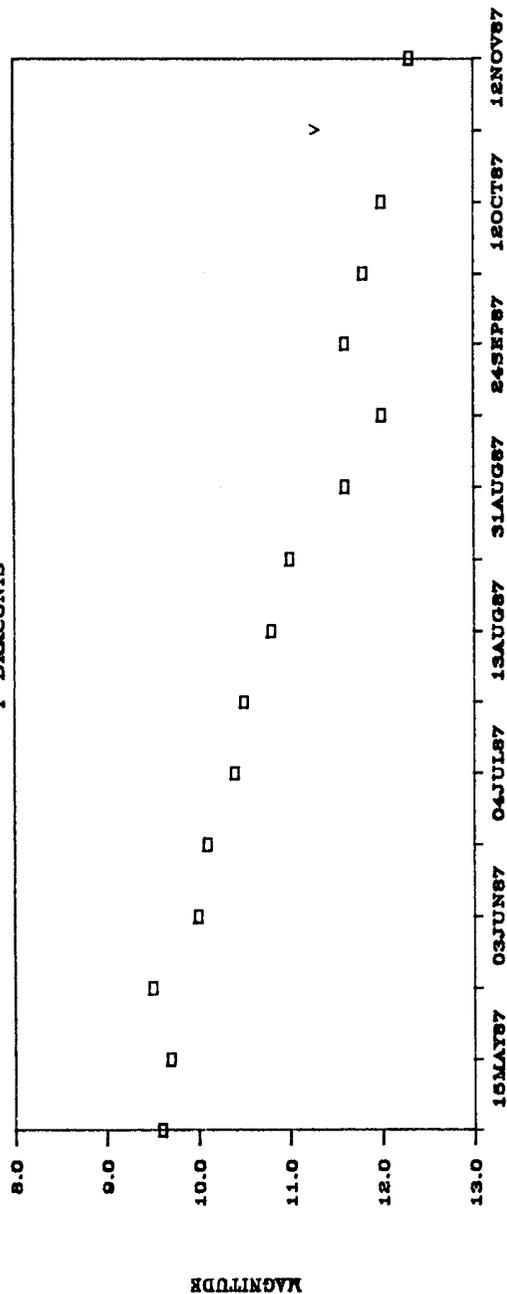
14

8711171820. (All stars in pencil drawing made within 1/2 h of 1820
Comet - not much tail - last most of it since 14th?)*
except predicted from 14th codes for comet position.
(17th Nov)

Expected
here →

Comet was seen for a few seconds about here on one of
16th, but cloud prevented any conclusive observa-
tion or drawing.

Variable Star Observations



This light curve shows T Draconis from May to September this year. This star is a long period variable, with a period of about 421 days. The curve shows it fading from a maximum to a minimum. The light range is rather small for this class of variable; from magnitude 9.6 to 12.3. Not an easy star to observe because it is a close double star.

PROGRAMME FOR DECEMBER

MONDAYS from 8pm **DOUBLE STAR & PLANETS SECTION**
 Mr N Taylor [redacted], Farnlands
 7-14-21-28 Trimley Tel: Fel. [redacted]
 Mr T Gillan [redacted], Bardwell
 Bury St. Edmunds. Tel: [redacted]
 Miss M Edwards [redacted], Felixstowe Tel: Fel. [redacted]

TUESDAYS from 8pm **GENERAL OBSERVATION SECTION**
 1-8-15-22-29 Mr N Gage, [redacted], Trimley Tel: Fel. [redacted]
 Mr R Newman [redacted], Felixstowe Tel: Fel. [redacted]
 Mr J King, [redacted], Felixstowe Tel: Fel. [redacted]

WEDNESDAYS from 8pm **NEBULEA & FAINT OBJECTS SECTION**
 2-9-30 Mr M Cook, [redacted], Ipswich Tel: Ips. [redacted]
 Mr D Payne, [redacted], Wickham Market. Tel: W.Mkt [redacted]

FRIDAYS from 8pm **GENERAL OBSERVATION SECTION**
 11 Mr R A Lobbett, [redacted], Felixstowe. Tel: Fel. [redacted]
 Mr J Hood, [redacted], Ipswich. Tel: Ips. [redacted]
 Mr M Harlow, [redacted], Felixstowe Tel: Fel. [redacted]

On nights other than Wednesday please contact directors to confirm dates.

1987 COMMITTEE

CHAIRMAN	D Payne	[redacted], Wickham Market, IP13 OSD	Work: [redacted] Home: [redacted]
VICE CHAIRMAN	D Barnard	[redacted], Ipswich, IP4 5PP	Home: [redacted] Work: [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]
MAINTENANCE	M Cook	[redacted], Ipswich, IP4 5PZ	Home: [redacted] Work: [redacted]
JOURNAL CO-ORD	E Sims	[redacted], Ipswich, IP1 4HA	Home: [redacted]
SOCIETY EVENTS	R Lobbett	[redacted], Felixstowe	WORK: [redacted] Home: [redacted]
F.A.S. ARTICLES	M Harlow	[redacted] TRIMLEY	Home: [redacted]
LIBRARIAN	P Richards	[redacted] IPSWICH	Home: [redacted]