

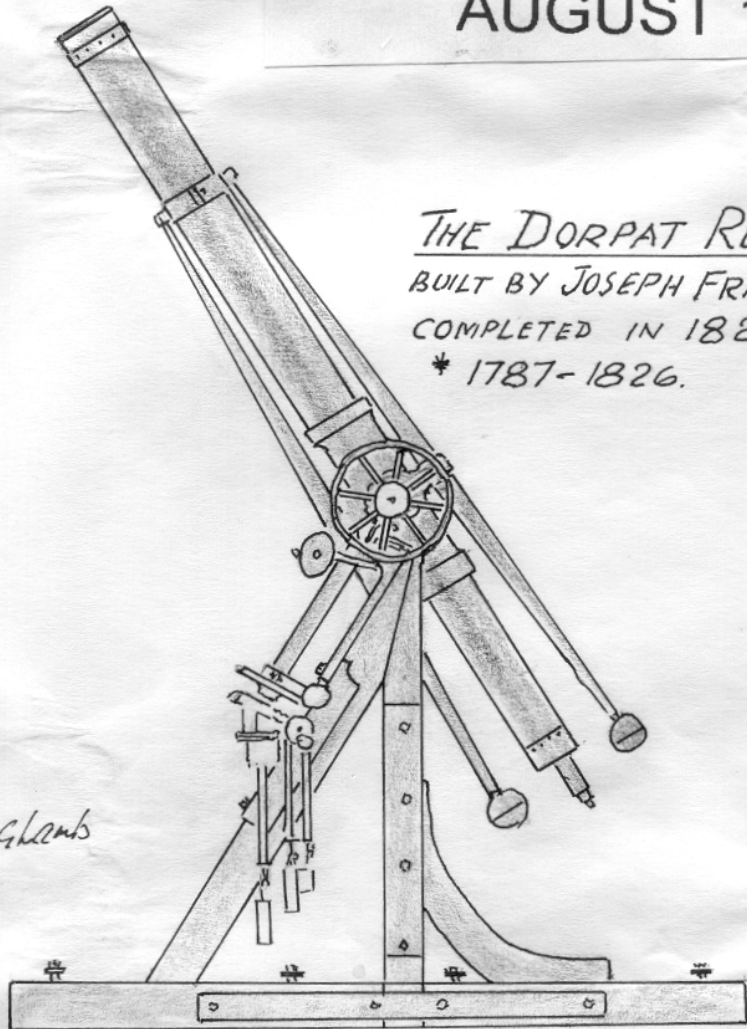
# ORWELL ASTRONOMICAL

## SOCIETY IPSWICH

Charity No 271313

### AUGUST 1997

*THE DORPAT REFRACTOR*  
*BUILT BY JOSEPH FRAUNHOFER \**  
*COMPLETED IN 1826.*  
*\* 1787-1826.*



## SOCIETY NEWS

### 1 Committee Meeting

The next committee meeting will be held on Saturday 20th September at the observatory, from 19:30. This will be an open meeting and any member is welcome to attend.

### 2 Events for 1997

Astro Camp

3rd to 17th Aug.

BAA Out of London meeting

12th, 13th, 14th Sept.

This year it is being held in Norwich at the University of East Anglia. As this event is being held over 3 days and tickets will need to be purchased. Please contact Roy Gooding if wish to purchase any tickets.

Registration £3.50

Meal vouchers £6.50

Lecture by Patrick Moore & John Mason £4.00 (13-9-97) in the evening. No start time given at present

The 3rd Equinox Skycamp

26th September to 5th October

Organised by the Laughton Astronomical Society. Held at the Dower House Touring Park East Harling Thetford. For more information please contact: Mike Cook

Romford

Essex

RM7 8RD

Please send a large SAE

FAS Cambridge Convention

Christmas Meal

4th Oct.

10th Dec.

### 3 Summer Excursion

A possible society excursion trip could be to the science Park at Herstmonceux. If enough members were interested, together with their families and friends it may be possible to hire a bus. Please let me have your opinions about this.

#### 4 New Evening Directories Required.

At present the observatory has only one regular meeting evening, on Wednesdays. If you would like to be trained to operate the observatory and would like to run an additional evening, please contact any committee member.

#### 5 Old Photographs

If any one has any old photographs showing any of the following, could they please contact Roy Gooding.

Field trips	Maintenance
Open days	Excursions

I am looking for a good selection of pictures to illustrate a booklet I have started for the society's 30th anniversary. The photographs will be digitised. This will do no harm to the pictures. They will only be scanned into a computer.

## NIGHT SKY

All times GMT

### SUN

Rises approximately	between	04:20 to 05:10
Sets approximately	between	19:40 to 19:00

### Moon

New Moon	3rd
First Quarter	11th
Full Moon	18th
Third Quarter	25th

MERCURY Mercury will be low down in the evening sky this month. A difficult object to see this month.

VENUS Venus will be well placed again this month in the western sky after sunset. Venus will be setting at about 20:30 in mid month. Mag -4.0

MARS Mars will also be low down in the west after sunset. It will be setting at about 21:20 in mid month. Mag. 0.9.

JUPITER Jupiter will be at opposition on the 9th. Mag. -2.8.

SATURN Saturn will be rising at about 21:00 in mid month. Mag. 0.5

URANUS Uranus will be at rising at about 18:40, making it visible through out the period of darkness. Mag. 5.9

Neptune Neptune will rising about 30 minutes before Uranus this month. Mag. 7.9

The Perseid Meteor Shower. This shower reaches a maximum on the 12th. The moon does not interfere this year.

### OCCULTATIONS DURING AUGUST 1997

The table lists stellar occultation disappearance events which occur during the month under favourable circumstances. The data relates to Orwell Park Observatory, but will be similar at nearby locations.

Date & Time (UT)	Lunar Phase	Sun Alt (°)	Star Alt (°)	Min Dist rad	Star	Mag
11 Aug 21:01	.53+	-13	12	.11S	SAO159275	7.4
14 Aug 22:45	.83+	-22	14	.37N	WZ Sgr	7.4
14 Aug 22:56	.83+	-22	13	.77N	SAO161255	7.5

James Appleton

### News from the Dome

#### Maintenance Work

The dome itself came under the spotlight during July. Hairline cracks in the base ring alerted observatory users that something was wrong. There was some concern that the problem might be very serious, necessitating expensive and time consuming repairs putting the dome out of action indefinitely. After a period of monitoring the decision was taken to investigate further. Some of the mahogany tongue and groove cladding was removed. This revealed that the cause of the problem was corrosion of the brackets holding the framework of the dome to the base ring caused by dampness and the passage of time. It now appears that fixing the problem is within our capabilities and we hope that we can get the observatory running early in the Autumn before the observing season starts in earnest. If this isn't possible observing will continue using the societies portable telescopes whenever possible and members coming along to help out. Volunteers to assist with repair work will also be important. Contact Martin Cook if you can help.

## 'Theme Nights'

In June two Wednesday night events - christened by one member as theme evenings - were held. The first of these gave members an opportunity to show and see photographs of Comet Hale-Bopp. This was highly successful, with around twenty members taking part. The other event was a discussion to consider what radio astronomy projects members could do. The fruit of radio astronomy meeting was the setting up of a radio astronomy section. Contact Pete Richards for more information.

## Tuesday Section

Two members are planning to start a Tuesday night section in the near future. The problems with the dome may delay the launch of this new evening, but it's hoped that it can start before the end of this year. An announcement will be made in the newsletter as soon as the start of the new evening session is confirmed. If you're already a director and are interested in attending the Tuesday evening sessions please contact John Hood.

## **Perseid Meteor shower - 11/12/13 August**

The Perseid meteor shower is one of the best of the year, with bright fast moving meteors which leave trains (trails) behind them, providing a celestial fireworks display on warm August evenings. Perseids begin to appear around 28th July and stragglers can be seen until about 20<sup>th</sup> August<sup>1</sup>. The shower peaks on the night of 12<sup>th</sup>/13th August and is quite active a few days either side of these dates. The evening of the 12<sup>th</sup> should see at least one meteor appearing every few minutes but may be even better.

The shower occurs each year when the earth passes through the debris left behind in the orbit of Comet Swift-Tuttle. Some members will remember seeing Comet Swift-Tuttle through the Orwell Park telescope when it was last in the inner reaches of the solar system in 1992 (its orbital period is around 130 years). Since 1988 the shower has seen a higher proportion of brighter meteors than usual and a new 'primary' peak of activity 12 hours ahead of the traditional maximum. It appears that these phenomena are due to new meteoric particles released during the recent passage of Swift-Tuttle.

The primary peak is due at 7 am BST on Tuesday the 12<sup>th</sup>, but it could be up to 4 hours early. Observers should see a good display on the evening of the 11<sup>th</sup> and should see activity increasing after midnight (fortunately the Moon sets around that time). The traditional maximum is due around 7pm BST so the night of 12<sup>th</sup>/13<sup>th</sup> could also be very good.

Mike Harlow is planning to correlate his observations in Suffolk with those made in Kent by the Crayford Manor House Astronomical Society (who proposed the joint meteor watch when they visited the observatory in July). Contact Mike for more information on the link-up with CMHAS.

## **Telescope Making Evening**

Wednesday August 6<sup>th</sup> has been designated a telescope making night. The main event of the evening will be a demonstration of mirror making by Mike Harlow. It will also be an opportunity for members to bring photos of any telescope making projects they've undertaken and to ask questions or offer answers in this area. The evening's activity nominally kicks off at 8.30pm.

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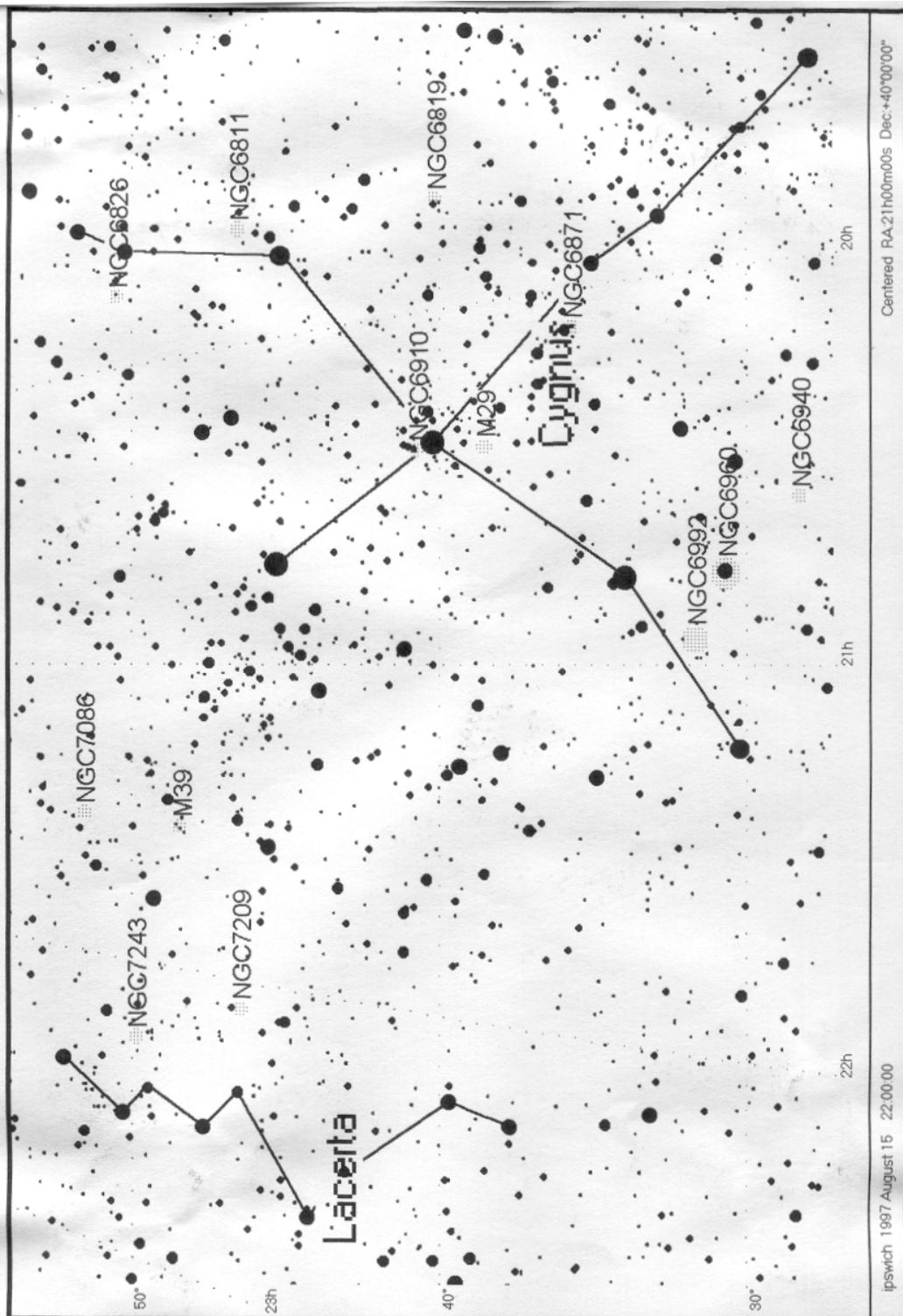
<sup>1</sup> Officially the limits are 17<sup>th</sup> July and 24<sup>th</sup> August

## **COMET HALE-BOPP**

Shown below is one of the pictures shown during the Hale-Bopp evening. It was taken by Pete Richards, with Kodak Ektar 1000 film. It was taken with an old Praktika SLR camera and a 135mm lens mounted on a tripod. The exposure time was about 40 seconds. The original photo shows longer, clearer, (blue) ion tail.



# PROGRAMME FOR AUGUST



Mondays from 7.30pm No Directors available for this night	GENERAL OBSERVATION SECTION
Tuesdays from 7.30pm Mr P Richards	OBSERVATORY VISITS FROM OUTSIDE GROUPS
Wednesdays from 8.00pm Mr M Cook	NEBULA & FAINT OBJECTS SECTION Mr D Payne
Thursdays from 7.30pm Mr P Richards	OBSERVATORY VISITS FROM OUTSIDE GROUPS
Fridays from 7.30pm 1st - 15th - 29th Mr J Hood	DOUBLE STARS

*All members are welcome on any night, but on nights other than Wednesday please check with the director of the night that the observatory will be open.*

### Lectures and other events:

**Committee Meeting** -----On Saturday 20th September at 7.30pm in the club room at the observatory. All members are welcome to attend.

e-mail enquires to [oasieng@btbcs.bt.co.uk](mailto:oasieng@btbcs.bt.co.uk)  
 WWW url <http://www.ast.cam.ac.uk:80/~ipswich/>

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