

ORWELL ASTRONOMICAL SOCIETY, IPSWICH.

SOCIETY NEWS

Graze Occultation Field Trip

A field trip will be arranged for Saturday, 22nd November, to observe this graze occultation. This is the only graze visible from East Anglia this year. It takes place at about 04.37. Observation sites will be chosen nearer the time. The predictions obtained for the track unfortunately end near Thetford and will have to be estimated towards the coast. Please contact any committee member or Alan Smith for more details. Final arrangements will be made on 19th November at the dome.

NIGHT SKY

(all times G.M.T.)

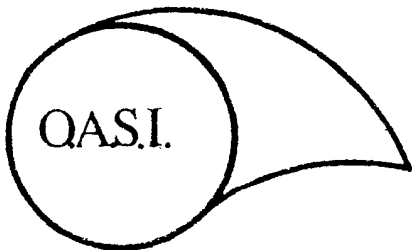
Sun Rises approximately between 07.00 - 07.50
Sets approximately between 16.30 - 15.50

Moon ● 2nd ◐ 8th ○ 16th ◑ 24th

Mercury will be at inferior conjunction on the 13th.
Greatest western elongation on the 30th, 20° Mag.-0.2
Venus At inferior conjunction on the 5th.
Mars Sets at about 21hr.40m. in mid month. Mag.-0.1
Jupiter Sets at about midnight in mid month. Mag.-2.6.
Saturn Close to the sun. Not easily observed this month.
Uranus Sets about 1hr.40m. after sunset in mid month.
Neptune Sets about 21hr.10m. after sunset in mid month.

R. Gooding.

WANTED WANTED WANTED WANTED WANTED
A 'Frontiers Of Space' W
N by Philip Bons & Kenneth Gatland. A
T 1969 or similar later edition N
E Published by Blandford. T
D Contact Roy Adams E
Ipswich D
WANTED WANTED WANTED WANTED WANTED



HERSTMONCEUX '86

Saturday 4th October was the date this year for the annual F.A.S. Convention at Herstmonceux. The first Saturday in October is a date eagerly awaited each year, since its inception in 1981. Every year a number of our members have attended. Some years we have been hard pressed to fill the car, other years we have managed to fill a mini-bus. This year, I am pleased to report we required one mini-bus and 2 cars from Ipswich, together with an additional three people from Essex and London. This gave a grand total of 24, the highest number for a society excursion since the 1970's when a 30 seater coach (who remembers Dave Brown and the white tornado) could be easily filled.

The meeting place this year was at Alan Smith's who had hired the mini-bus. Every one intent on travelling in the minibus had assembled here by 8.25. Eric Sims with attendant family had decided to journey independently and had left 15 minutes earlier.

By 8.30 we were on our way travelling towards our favourite excursion sunspot, 'Costa' Thames Bank where we would proceed to traverse the river as present day Troglodytes. The journey to the Dartford Tunnel was uneventful without any hold-ups, not even at Chelmsford. However, several curiosities happened to catch my eye. The most bizarre sighting was at the start of our journey, where a large notice in bright red letters was seen in Belstead Road, advertising a rival attraction for the 4th. The Anglian Water Authority had decided not to be out-done by the C.E.G.B. at Sizewell, and were staging their public open day with no expense spared. If you and your family were getting tired of having pic-nics at all the local beauty spots and longed for a change of air, in fresh surroundings, how about the convenience of a day out at your local sewage treatment works! The vehicle recovery services of the A.A. and R.A.C. must have fallen upon hard times. Their respective vehicles had been parked vulture-like in the middle of numerous fly-overs all the way to the tunnel, waiting eagerly for dying cars to pass by. Have you ever seen a regatta taking place along the A12? I did. Two large mastless boats on transporters were seen voyaging in parallel along the opposite carriage way on course for an unknown finishing gun. Their speeds would have done justice in any power boat race.

The mini-bus was well behaved except for the battery which Alan told us was suspect, the speedometer which did not wake up from its slumbers until Chelmsford, and the super responsive suspension. Every bump in the road was amplified to the extent that the inside of the van gyrated around much as a boat does on a choppy sea. A request for sea sickness tablets would not have been frowned upon.

Our party arrived at Herstmonceux at 11.00. The time taken to get there was 2½ hours, making this one of the fastest runs we have had for this particular trip. Any potential hold-ups was at the numerous road works after the tunnel never materialized. The first priority after parking the mini-bus was to find a supply of coffee. In previous years we had made use of the cafe; this year coffee was being served in the Castle. Whilst we were waiting in the queue, Roy Cheesman stumbled across our group, having arrived some time earlier.

After the refreshment break our party fragmented and dispersed all round the Castle in pursuit of the various trade stands and exhibits; others went walking round the Castle grounds. Eric Sims and family were found wandering round the gardens. Dave Payne and family did not arrive as early as they had intended, having been delayed by the road works mentioned before.

The first three years of F.A.S. Herstmonceux Conventions developed a reputation for abysmal weather. 1984 and 1985 were a considerable improvement. The scape goat for the bad weather was Dave Payne. He missed these two good years because of work commitments in America. This year the weather pulled out all the stops. The sun shone continuously all day from a cloudless blue sky. In fact the day was probably the best Saturday since July. Any astronomical programme that coincides with good weather is a rare occasion, an event to be savoured with fond memories.

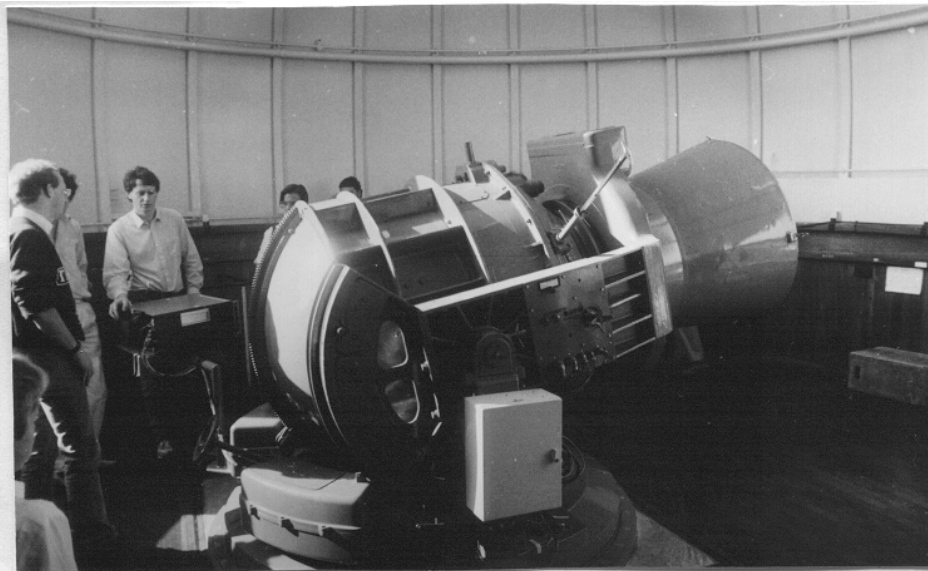
As the time approached one o'clock our thoughts were inclined towards lunch. The last member of our group arrived just as we were starting; Donald Taylor is a member of the Haringay Astronomical Society officially known as A.S.H. or Astronomical Society of Haringay, Don has visited us at Orwell Park for the last two years while holidaying in the area. Packed lunches were enjoyed on the grass in front of the Castle, with everyone taking full advantage of the Indian Summer.

After lunch our party again split up, going their separate ways. The largest group made their way up the hill to the Equatorial Group. The public exhibition that used to be housed in the Castle had been moved up to this group of buildings. Several of the domes were open for inspection. The first dome visited was home for the Hewitt camera. This was used for determining the precise orbits of artificial satellites. This was no ordinary camera, it had a 24" diameter corrector lens, with a 30" mirror behind. I only attended one lecture out of the five scheduled for the day. The title was 'Encounter', a journey through the solar system. The programme was a typical audio visual display. For those who are not familiar with this type of presentation I will explain. Two slide projectors are used, that alternatively fade in and out sequential slides on to the same screen, backing music is supplied to complete the presentation. The first part of the programme was about hot air ballooning, followed by a selection of recent planetary probe photographs.

A visit to the RGO cafe was followed by the annual visit to the Laser Ranging Telescope. Every year something new has been fastened to the outside of the telescope tube. This year was no exception, a long black tube accompanied with its 'Black Box' which was actually bright orange in colour, had been fastened to the telescope tube. The tube housed a new low light T.V. camera. Alan the perpetual optimist remembered that in previous years there had been a different camera in use, asked about its present location. Unfortunately it was not surplus to requirements and was in use elsewhere. Everyone would have liked to have seen the laser fired. Unfortunately the next firing was not until 04.00 the following morning, which we would have to miss.

After a last perusal round the trade stands, we set off for home at 6.30. Another Herstmonceux ritual is to stop off at the Cross Keys at Herst Green. Our stay here was longer than in previous years as some of our group decided to have a meal. A meal at the pub was insufficient to satisfy the needs of our party, so an additional stop was made at a fish and chip shop in Orpington. The remaining journey home was uneventful and was completed by 11.00. The complete list of mini-bus travellers was: Martin and Judith Cook, Roy and Margaret Lobbett, David Barnard, Maria Foster, Michael Harlow, Garry Marriott, Nigel Gage, Wendy, Alan Smith and myself.

R. Gooding.

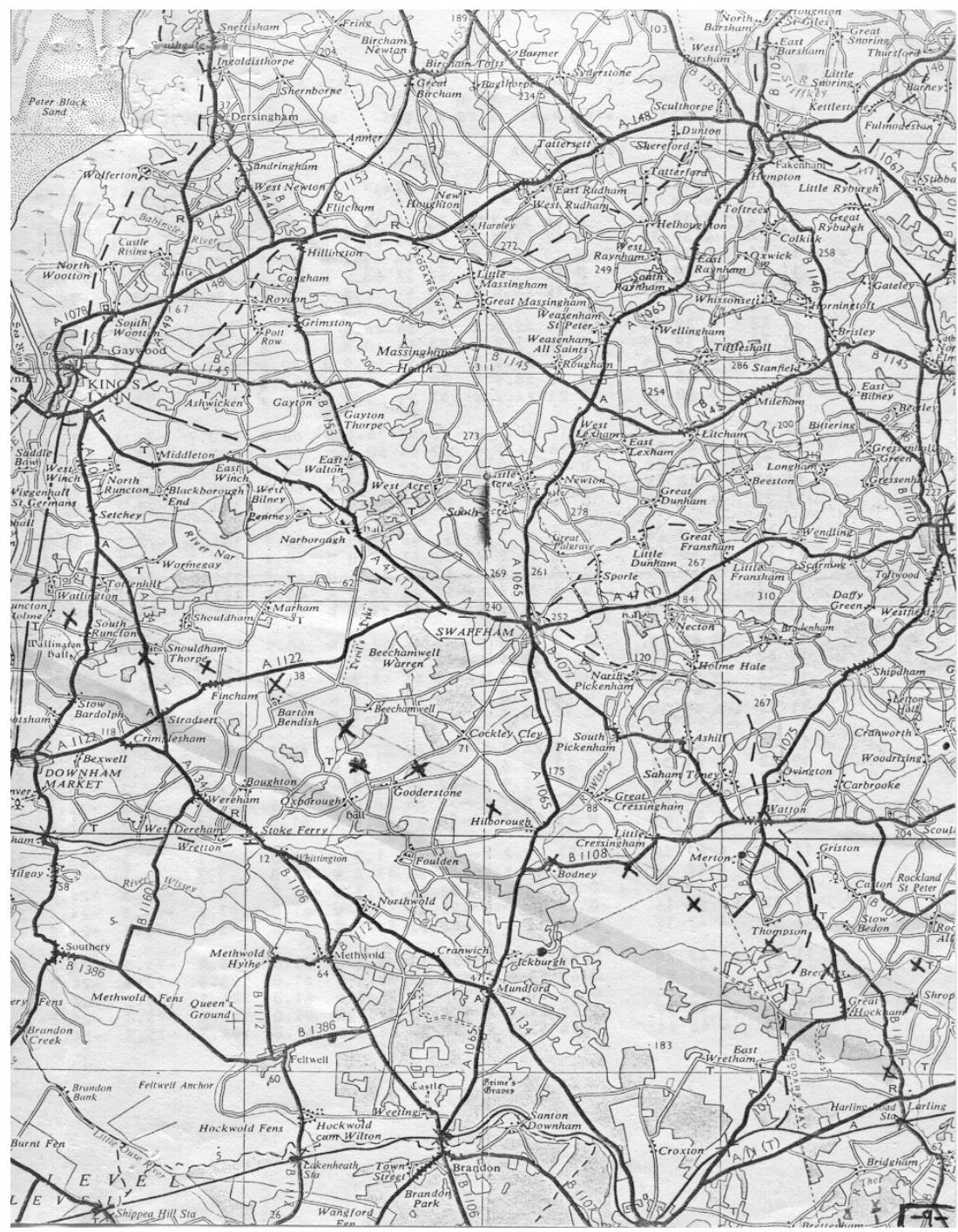


THE HEWITT CAMERA



THE LASER RANGING TELESCOPE

The laser is on the other side of the telescope



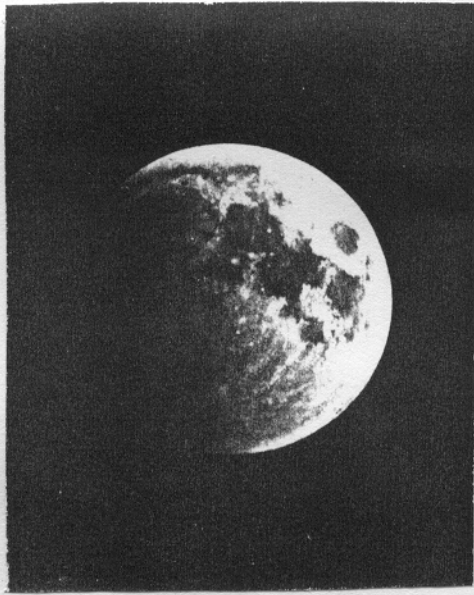
OCTOBER'S TOTAL LUNAR ECLIPSE by Mike Harlow

As I hadn't seen a total lunar eclipse for over ten years I was very pleased to see a clear blue sky when I got up on 17th October. That evening at 6.30 the moon was due to enter the Earth's shadow and then be totally eclipsed just over an hour later. The Breakfast Time weather forecast looked pretty good although some cloud was coming over from the continent sometime that night.

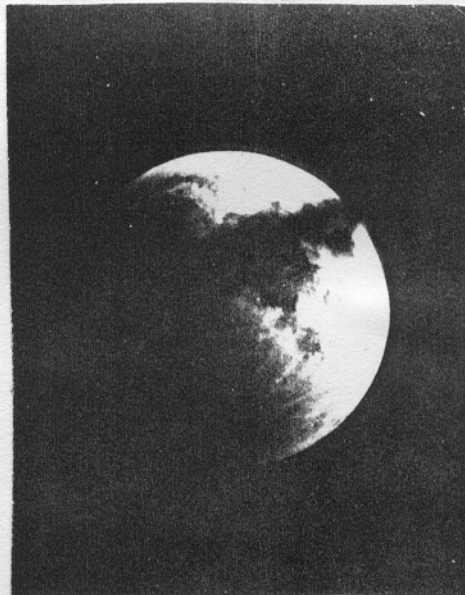
After work Roy Lobbett and I went straight to the observatory where we were joined by Gary Marriott. Roy and Gary had 500mm and 400mm lenses for their cameras with black and white and colour films. I plugged my SLR camera onto the 4 inch f/12 refractor on the side of the main telescope. This was better than the 10 inch itself because the prime focus image of the 4 inch covers about half of a 35mm negative whereas the 10 inch primary image is too large.

The moon was clearly visible by 6.10 in a blue sky although there were wisps of cloud near the horizon. By 6.15 it was apparent that the bottom left of the disc was darker--this was the part of the moon in deepest penumbral shadow. By 6.30 when the umbral shadow began to move onto the disc all the cloud had melted away. The first photo shows the moon at 6.30 in deep penumbral shadow.

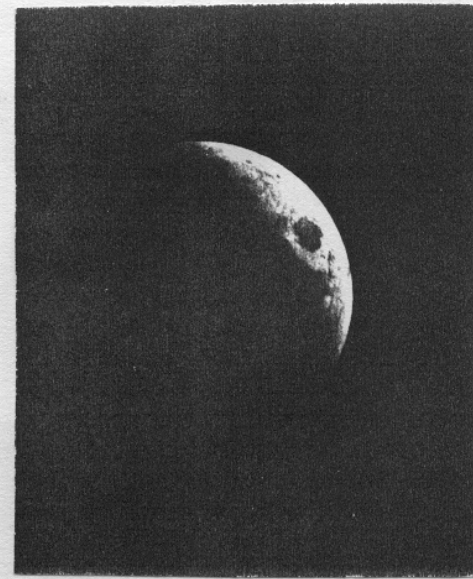
At 6.48 I missed what would have been a classic photo. Looking through the telescope I saw a high flying passenger aircraft move directly across the



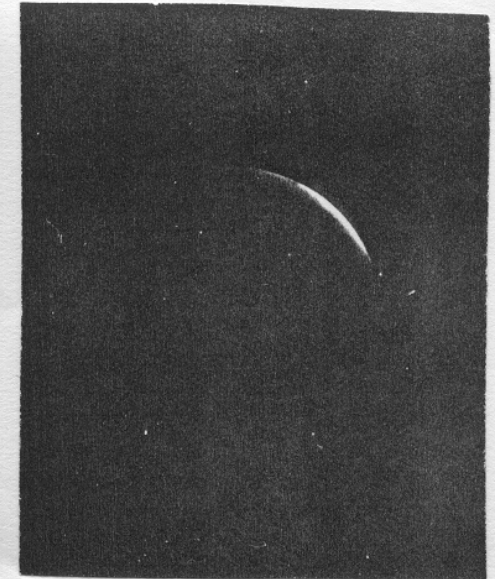
6.30 p.m.



6.50 p.m.



7.15 p.m.



7.40 p.m.

middle of the disc, it and its vapour trail showing up in silhouette against the partially eclipsed moon. The vapour trail was still visible when I took my next photo.

Around 7.00 the eclipsed part of the moon was obviously reddish in colour through the telescope although visually the bright side of the moon drowned out this subtle colouring.

There was a mini invasion of children from the school from this time until totality all of whom were very impressed with the sight. This was in sharp contrast to the response on seeing Halley's comet late last year!

The moon was totally eclipsed just after 7.40 when it appeared a coppery-red colour. Soon after this it disappeared completely much to everyone's surprise until we realised that the cloud was beginning to come in. The eclipsed moon reappeared briefly before being totally obscured by the thickening cloud. Although initially disappointed at this premature end we considered ourselves lucky to have seen as much as we did.

We all waited as long as we could until it was obvious that we wouldn't see anything else so we closed up the dome and went for a quick drink at the Ship.

As I was curious to see how my photo's had come out I developed the negatives that night when I got in and spent most of the next day printing them.

If you missed this eclipse and want to try some photo's of the next one I'm afraid there is a bit of gap as the next total lunar eclipse isn't until 17th August 1989 at around 3 a.m!

VARIABLE STAR OBSERVATIONS

by Mike Nicholls

This light curve shows V Coronae Borealis from April to October this year. This is a long period variable, and the light curve shows a typical maximum for this star. Notice that the rise to maximum is much steeper than the fall towards minimum. The period of V CrB is around 358 days; about a year. This means that the minimum continually occurs at a time when the star is difficult to observe.

