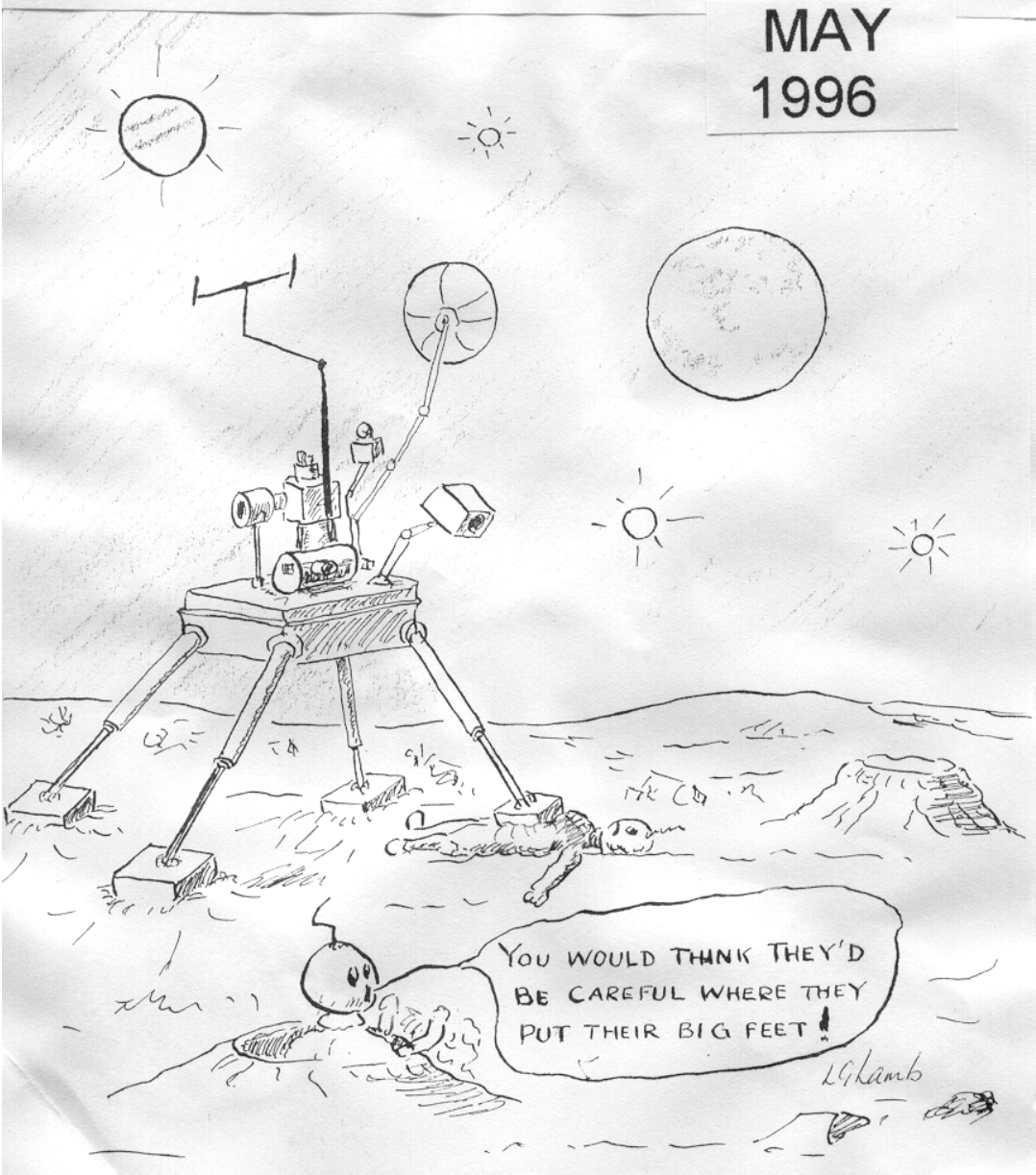


ORWELL ASTRONOMICAL SOCIETY IPSWICH

Charity No 271313.

MAY 1996



SOCIETY NEWS

1 Committee Meeting

The next committee meeting will be held on saturday 20th April at the observatory, from 1930. This will be an open meeting an any member is welcome to attend.

2 Events for 1996

This list of events was first presented at the AGM.

Oxford Weekend	10th May?
WEB Society AGM Cambridge	1st June
BAA Comet Section Meeting Cambridge	8th June
BAA Exhibition Meeting	29th June
Astro Camp	11th Aug.
Dower House Towing Park, Thetford	6 to 15 Sept.
Horncastle Weekend	6th Sept.
National Astronomy Week	21 to 28 Sept
FAS Cambridge Convention	5th Oct.
Christmas Meal	11th Dec.

NIGHT SKY

All times GMT

SUN

Rises approximately at 05.40 to 03.50
 Sets approximately at 19.25 to 20.10

MOON



3rd



10th



17th



25th

MERCURY Mercury will be in the evening sky at the beginning of the month. It will be at inferior conjunction on the 15th.

VENUS Venus is at its maximum brightness on the 4th, Mag -4.6. By the end of the month Venus will be lost in the evening twilight.

MARS Mars will be rising about an hour before the sun this month.

JUPITER Jupiter enters the evening sky this month. By the end of the month it will be rising by 23.00. Mag. -2.5

SATURN Saturn will rising by 03.00 in mid month. Mag. 1.0.

URANUS Uranus will be rising at about midnight in mid month. Mag. 5.8.

Neptune Neptune will be rising about 30 minutes before Uranus.

Hyakutake - Comet of the Century?

David Payne

When comet Hyakutake 1996 B2 was discovered in the early morning of 31st January by the Japanese amateur astronomer Yuji Hyakutake it was already on the last months of its flight round the Sun after falling for approximately 8000 years or so from it's most distant point in it's very elongated orbit. The added coincidence that the Earth was going to be almost due south of it, as the comet crossed the Earth's orbit on the 26th March, and at its closest approach on the night before, with a distance of only about 10 million miles, certainly made it the surprise of the century. Even in early February estimates of apparent brightness were indicating that this comet was going to be special! By the end of February it was clear that the comet was indeed exceptional and may well be the best this century, and northern observers would get the best views!

Even by the end of February and early March news of the comet had not yet reached the popular press but it was only a matter of time before it would. The Society at this time had no plans to open the observatory to the public, we were going to wait until National Astronomy Week at the end of September for our annual "Open Weekend". An urgent decision was made at an impromptu committee meeting and it was decided to open the observatory over the weekend of Saturday 23rd March though to Monday 25th March. The weather had been particularly dull during February and the early part of March was no different but we had nearly three weeks for it to clear up and spring was supposed to be coming!! Posters were designed, printed and distributed in record time to the newspapers, libraries, schools and of course the Society membership.

Several pictures from more favoured lands (weather wise!) appeared on the Internet and the press finally started mentioning it. But the cloud cover over most of the UK (and particularly East Anglia!) refused to disperse. It had now been three weeks since the decision to open the observatory, with the "Open Weekend" rapidly approaching, and in common with most of the membership and for that matter most of the population of the UK, I had still not seen comet Hyakutake! Some of our members don't take this sort of thing lying down and decided to go off to Tenerife where they were assured clear skies would be theirs. I'm not too sure if this is true but Pete Richards and Mike Harlow

OCCULTATIONS DURING MAY 1996

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 (radii)	PA (°)	Star	Mag
Wed 01 May	02:17:38	.93+	-16	10	.90S	173	25 Vir	5.9
Wed 08 May	01:00:10	.74-	-19	9	.17S	94	Rho Sgr	4.0
Wed 22 May	21:06:41	.25+	-9	20	.47S	134	ZC1237	6.9
Fri 24 May	21:14:29	.43+	-9	27	.83N	56	ZC1440	7.4

James Appleton

together with six members from the Bristol Astronomical Society took themselves off for a weeks holiday in sunnier and clearer climes! During the stay Mike, who had thoughtfully taken his camera with portable mount for astro-photography, took a number of splendid pictures of Hyakutake,

The "Open Weekend" arrived with Saturday a dull, grey, cold day followed by a dull, even greyer and colder evening. The few visitors who did venture out were given a tour/guide of the observatory and a lecture on comets with some pictures, down loaded from distant lands via the Internet, of how Hyakutake should have looked if it had been clear. Sunday was also cold, grey and damp with a similar if not colder evening. Another enthusiastic group of visitors were again treated to the description of the observatory and the lecture on comets. It has to be said that most of the visitors did seem to be genuinely interested in what they were shown and understood our plight with the weather. Monday arrived (our last advertised night!) it too was cold and grey but brighter? By the time the evening came there was still a layer of cloud obscuring the sky but a very pale moon could be seen shining through, was there going to be a chance?

At first things looked as bad as ever, the description of the observatory and telescope was duly given to the thirty or so visitors that had braved the weather and the comet lecture started. About half way through the talk on comets we were interrupted by our car park attendants, Roy Gooding and Martin Payne. They had seen a faint fuzzy glow near the zenith, no other stars were visible but the moon was showing faintly through the cloud. The lecture was instantly abandoned and the dome positioned and telescope pointed at the approximate place in the sky. After a few minutes of dark adaption we could just make out this fuzzy glow high in the northerly sky. The 10" refractor telescope was aligned on the object and a small but distinct fuzzy nucleus could be seen through the cloud with a surrounding glow that definitely seemed to be positioned off centre to the nucleus. The excitement by both members and our visitors was tremendous even though it was barely visible through the cloud. (and threatening to disappear again at any minute) but in some respects because none of us had yet seen the comet and our first glimpse was through cloud, when no other stars were visible, just what would it be like if it was clear with a dark sky!

** We had all just been staring at a brilliantly lit projection screen but with the level of light pollution around the observatory these days, it doesn't take long to get "dark" adapted.*

That Monday night was most memorable despite the cloud and that we could barely see the coma and nucleus. All the visitors seemed thrilled and of course they were amongst the first to see it in the UK, or at least in East Anglia (OK Ipswich!!).

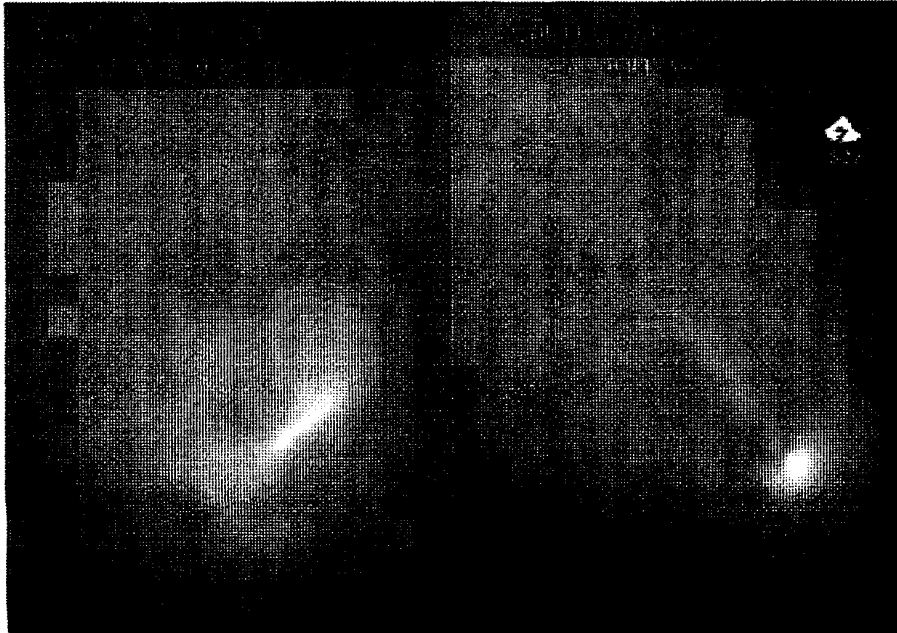
That was the end of our rather cloudy and generally disappointing "Open Weekend" however Tuesday 26th March the weather began to clear and although Tuesday evening was cloudy there were some extended clear patches. Tuesday was definitely the best night of that week and although the weather did get clearer towards the end of the week the moon was also rapidly approaching full which tended to obliterate the fainter features of the tail. Also the distance of the comet from the Earth was increasing rapidly and although it was getting closer to the sun the net effect was for it to fade quite rapidly by 1-2 magnitudes over the next few days. On that Tuesday night I started to observe the Comet by eye and with binoculars both a 7x50 monocular hand held and 11x80s tripod mounted. By eye the tail was magnificent and I could discern a tail stretching back at least twenty degrees!

On Wednesday night I was back at the Orwell Park Observatory and although we were officially closed to the public we had as many visitors that night as any of the nights of our official "Open Weekend"! By Wednesday a combination of a slight haze, the very bright moon, sky pollution over Ipswich and the comet fading, the tail had shrunk to less than five degrees visibility by eye. The remainder of the week was clear but the moon interfered significantly with naked eye observations. I used my 10 inch reflector to see if any structure to the nucleus could be seen but even with a range of magnifications the coma appeared smooth and featureless.

The next event of significance was of course the total eclipse of the moon on the third of April. This was not so much to see the eclipse although that is certainly an event to be seen and observed in it's own right, but in this case it was an opportunity to observe the comet for the first time since Tuesday the 26th March in a comparatively dark sky. In the event the eclipse was spectacular, a lovely deep red at totality, just after 12:30am on the morning of 4th April, but the comet although better was now low down and affected by sky glow from the street lights in the village where I live (Ipswich would have been even worse!). Since then with the rather indifferent weather the best night was Wednesday 17th April. With the clearest skies so far and no moon the comet was magnificent the dust tail was now clear with a very distinct bow shock in front of the nucleus which then was swept back in a graceful arc to

merge with a magnificent tail.

The comet is now rapidly heading towards perihelion on the 1st May, but during the last days of April it could still be a magnificent object in the Western Sky just after Sunset. This is also a good time to find Mercury which is situated less than 15° to eastwards of Hyakutake it should be interesting to compare the objects to see which is the most visible by eye. The comet will rapidly drop towards the horizon at sun set as the end of the month and perihelion approaches. After perihelion it may still be possible to see the comet as a morning object (around perihelion the comet is both a morning and evening object being north of the sun it both sets just after the sun and also rises just before the sun. However unless the perihelion passage produces enough material in the tail to make it bright enough to be seen in daylight or at least very bright twilight this will probably be the last chance for northern observers. After the 8th May the comet rises after sunrise and will only be observable with the Sun above the horizon which probably means the end for northern observers. However it could be, that during the first few weeks of May Southern observers may still get some splendid views in the morning sky.



Picture of Comet Hyakutake 1996 B2 taken on 18th April 1996 at the Pic du Midi Observatory in France

PROGRAMME FOR MAY

Mondays from 7.30pm No Directors available for this night	GENERAL OBSERVATION SECTION
Tuesdays from 7.30pm Mr D Barnard [REDACTED] daytime only	GENERAL OBSERVATION SECTION
Wednesdays from 7.45pm Mr M Cook [REDACTED]	NEBULA & FAINT OBJECTS SECTION Mr D Payne [REDACTED]
Thursdays from 7.30pm Mr P Richards [REDACTED]	OBSERVATORY VISITS FROM OUTSIDE GROUPS
Fridays from 7.30pm 10th - 24th Mr J Hood [REDACTED]	DOUBLE STARS Mr M Barritt [REDACTED]

All members are welcome to come but, on nights other than Wednesdays please check with the director of the night that the observatory will be open.

Lectures and other events:

COMMITTEE MEETING ----- On Saturday 15th June at 7.30pm in the club room at the observatory. All members are welcome to attend.

VISITS -----

e-mail enquires to oasienq@btbcs.bt.co.uk
WWW url <http://www.ast.cam.ac.uk:80/~ipswich/>

1996 COMMITTEE

	Home Phone	Work Phone
CHAIRMAN	D Payne	[REDACTED]
SECRETARY	R Gooding	[REDACTED]
TREASURER	M Nicholls	[REDACTED]
MAINTENANCE CO-ORD	M Cook	[REDACTED]
JOURNAL CO-ORDINATOR	E Sims	[REDACTED]
PUBLICITY & VISIT CO-ORD	P Richards	[REDACTED]
EQUIPMENT CURATOR	M Harlow	[REDACTED]
SPECIAL EVENTS CO-ORD	A Smith	[REDACTED]
LIBRARIAN & COMP SOFTWARE	J Appleton	[REDACTED]
JOURNAL ARTICLES TO	E Sims [REDACTED]	Ipswich Suffolk IP1 4HA
CORRESPONDENCE ADDRESS	R Gooding OASI Secretary	[REDACTED] Ipswich Suffolk IP1 6AE