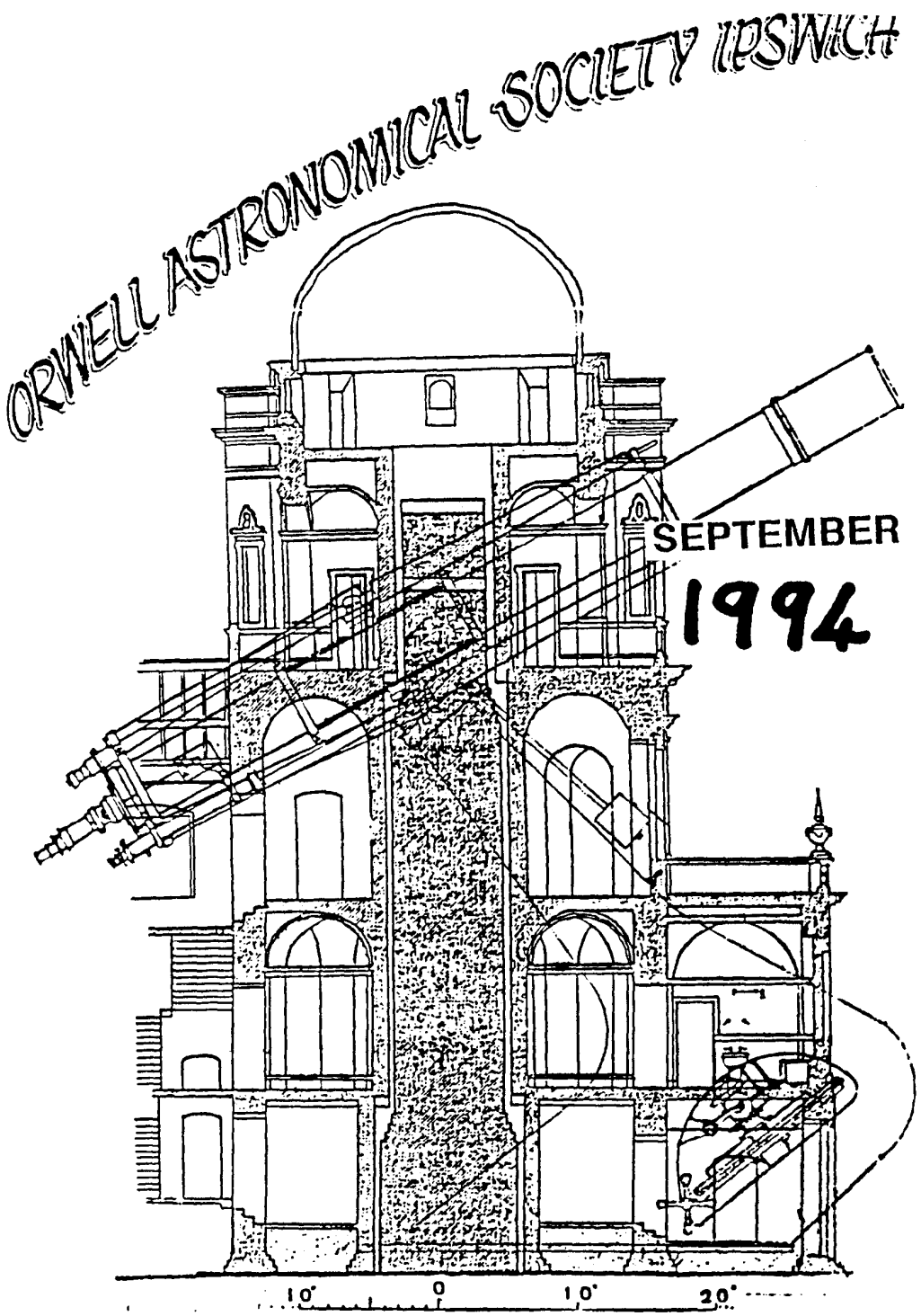


# SOCIETY NEWS

## 1 Committee Meeting

The next committee meeting will be on Saturday 1st October from 7.30. As usual this is an open meeting and any member is welcome to attend.

## 2 List of Events For 1994

i) FAS CONVENTION CAMBRIDGE 24-9-94

At the time of writing I have not yet received any information about this meeting. Any one interested in attending please let me know, as tickets will have to be ordered.

ii) OPEN WEEKEND

The dates for the annual Open Weekend will be from 11th to 12th November. At the time of writing, this has not yet been confirmed.

iii) Christmas meal. Sometime in December 14-12-94

v) Norwich AS will be approached, with the aim to arrange an evening visit to their new observatory site.

## 3 Open University TV Programmes

The Open University is running an astronomy course this year, and BBC2 will be showing a series of programmes for this:-

| | BBC2 08.45 1st showing Sunday | BBC2 24.00 Repeat Thursday | |
|---|---|---|---|
| TV8 | 11-9-94 | 15-9-94 | Cosmology on Trial |

# NIGHT SKY

All times GMT

SUN

Rises approximately at 05.11 to 05.59
Sets approximately at 18.47 to 17.39

## MOON

**5th** **12th** **19th** **28th**

MERCURY Mercury returns to the evening sky this month. greatest eastern elongation is on the 26th (26°). It will not be easily seen as it remains near to the horizon.

VENUS Venus remains visible in the western sky this month, but is close to the horizon. Venus will be at its greatest magnitude on the 28th, -4.6.

MARS Mars will be rising at about 23.30 in mid month. Mag. 1.1.

JUPITER Jupiter will be setting at about 20.00 in mid month. Mag. -1.8

SATURN Saturn will be at opposition on the 1st. Mag.0.5

URANUS & Neptune Both planets are in Sagittarius, and will be visible all night. They will be setting at about 23.00 in mid month.

R.Gooding

# Far From The Madding Cloud

**by Peter Richards**

Seeking darker clearer skies many amateur astronomers now follow the professionals and fly south for the Winter (and Summer). This year, in the midst of a cold damp and cloudy British March, I joined them. Teaming up with a group from the Bristol Astronomical Society I headed for the Canary Islands.

The Canaries are a group of islands, formed by volcanic action, in the Atlantic Ocean just of the coast of North Africa (near The Sahara). Many of the migrant astronomers chose to go to the island of La Palma, which is home to one of the worlds leading observatories and includes a number of British telescopes. A disadvantage of La Palma is that the choice a package holiday trips is very limited in the Winter, and there are no direct flights at present.

The group I went with chose to go to Tenerife as they had a number of times before. This was for a number of reasons: the great number of last minute bargain package deals available; the possibility of direct flights from Bristol Airport; and it had proved to be an excellent destination on previous trips. For the group a particular advantage is the possibility of a visit to the observatory on Tenerife, courtesy of a former Bristol Astronomical Society member - Mark Kidger - who has been a professional astronomer there for a number of years.

Tenerife was formed as a volcano which grew out of the ocean to a height of over 12,000 feet. In prehistoric times it blew its top, leaving a large caldera in the form a plateau, ringed with mountains. The highest of the remaining peaks is Mount Teide, which is virtually as high as the original volcano and is the highest mountain on Spanish territory.

We spent much of our time during the day on solar astronomy. The beach provided the ideal observation site from which to measure the solar radiation -using a 'white-body detector'. Caution must be used in all observation of the Sun and for this type of work the use of filters is essential, my preference being for factor 25. Using the wrong filter, or none at all, can lead to the detector becoming overloaded in which case it will turn bright red.

At nightfall, after a day of solar observation on the beach, we headed up the mountain in search of more distant suns. Soon after sunset (having looked for the green flash - unsuccessfully) we donned heavy coats, scarves, gloves, woolly hats, and collected together the parts of the portable 10 inch Dobsonian[1] telescope.

[1] See 'afterwords'.

The Dobsonian had been constructed for a previous trip from odds and ends of scrap materials (a very 'green' telescope being mainly of recycled components), excluding the optics. The relatively low cost of the telescope body would allow it to be dumped at the airport on the return leg to avoid a hefty excess baggage charges (due to the weight of souvenir donkeys and duty frees). The optics were carried as hand luggage. In fact, the telescope has survived many expeditions, and after several years use still gives excellent service; 'El Telescopium' always amuses the Spanish airport security officers.

Walking through the foyer of the apartment block on a balmy 'tropical' evening, four stargazers in Winter clothing, carrying what looked not unlike a set of rabbit hutches, aroused some considerable curiosity amongst shorts and tee-shirt clad tourists who were heading for the *centros nocturnos*[2]. "No it's not a karaoke machine", I said when one non-astronomer tourists enquired about the function of the Dobsonian base box as we descended in the lift.

The Fiat Tipo we had hired could barely carry four astronomers and assorted observing equipment. The Dobsonian which weighed heavily on the laps of those in the back of the car. We climbed the seemingly endless winding mountain road and a succession of tall mountains ahead and above turned into small foothills behind and below us. "It's not like Suffolk!", I thought to myself as the altitude started to make my ears pop. Eventually we left a desert cactus laden landscape and, at an altitude where the climate was much cooler, we were in coniferous forest.

We stopped at a clearing at the edge of the road and unloaded ourselves. We were at 7000 feet in a cold and windy spot on the edge of the caldera. Our precautions against the cold, which had seemed absurd at sea level, now seemed quite sane. Although not freezing, the contrast with sea level temperatures with an additional wind chill was considerable. Then we looked upwards...

*The sky was clear - remarkably clear... A difference of colour in the stars - oftener read of than seen in England - was really perceptible here. The sovereign brilliancy of Sirius pierced the eye with a steely glitter, the star Capella was yellow, Aldebaran and Betelgueux shone with a fiery red.*

The italicised text is not mine, it's Thomas Hardy's[3] from 'Far from the Madding Crowd', but it is the perfect description of the night sky we saw on the edge of the caldera on Tenerife. Incidentally, I've never seen a comparable sky in the British Isles. The star Canopus, which is below the horizon from the British Isles, was quite high in the sky. Another immediate impression was that of the great number of naked eye stars which made many of the constellations difficult to recognise: I would like to deny the rumour that I failed to recognise Canis Major and thought I'd discovered a new asterism which I christened 'Tiddles the Cat'. [O.K., I must admit, I did.]

[2]Spanish for Night Clubs.

[3] See 'afterwords'.

Under these excellent conditions I had no difficulty making out spiral structure in M51 (the whirlpool galaxy). And, as well as colour being more obvious in the stars, it was also apparent in the Orion Nebula through the 10 inch Dobsonian. The celestial spectacle and the altitude conspired to make are heads spin.

We carried on observing until our enthusiasm ceased to outweigh the increasing chill and we descended back into the welcoming heat.

In the afternoon of the final day we visited the Tenerife observatory as guests of Dr Mark Kidger. We had an excellent tour, seeing many of the large number of telescopes there which included, optical, radio and infra-red instruments, and a number of solar telescopes.

The work at Tenerife is wide ranging with solar work evidently one of the main activities. The radio observations included the Cosmic Background Radiation with observations from Tenerife playing a crucial role in observing the unevenness in the distribution of matter as it was 'shortly' after the Big Bang.

We also were shown a giant crane which had been shipped in to assist the construction of a new French telescope building; a giant crane that many people said should never have been left on the plateau in winter. The people who gave the warning were right. When we saw it, the crane had been reduced to a tangle of scrap metal by a ferocious storm.

At the end of the visit we had coffee in the restaurant at the astronomer's residence, where we watched the Sun setting spectacularly behind Mount Teide.

All this - and no jet-lag (the local time was the same as UK time - GMT - when we were there). In conclusion, the Canary Islands offer a great way of getting to superb skies and defrosting after a winter of chilly observing sessions.

***AFTER-WORDS on Far From the Madding Cloud:***

***The Dobsonian*** is the classic low-cost quick-to-build portable telescope design invented by amateur telescope maker John Dobson. The example we used on Tenerife took the features of the design to their absolute limit - having taken one evening and less than £15 to make.

***Thomas Hardy*** had a great interest in astronomy. A number of his books include paragraphs describing the starry skies and his poems include 'At a Lunar Eclipse'. His book 'Two in a Tower' had astronomy as a central theme. One of the two main characters is an astronomer with the tower being an observatory. Written in 1882, the book has interesting similarities to Orwell Park, which was a working observatory at that time.

# Helen Sharman O.B.E.

# At

# Orwell Park School

**On Friday October 14th at 7-30pm Helen Sharman is to give a talk at Orwell Park School. The title of the talk is**

# "Seize The Moment".

**Tickets are £6 and obtainable from the school.**

**Make cheques out to (Orwell Park Concerts).**

**Enclose self addressed stamped envelope.**

**To**

**School Secretary "Concerts"**

**Orwell Park School**

**Nacton**

**Near Ipswich**

**IP10 0ER**

## PROGRAMME FOR SEPTEMBER

| DAYS &DATES | DIRECTORS | SECTION & ADDRESSES | PHONE INC. STD CODE |
|---|---|---|---|
| Mondays | from 7.30pm | GENERAL OBSERVATION SECTION | |
| 5-12-19 26 | Mr J King | , Felixstowe, IP11 9LQ | |
| Tuesdays | form 7.30pm | GENERAL OBSERVATION SECTION | |
| 6-13-20 27 | Mr D Barnard | IP3 8RN | |
| | Mr J King | (Address above.) | (Number above) |
| Wednesdays | from 8.00pm | NEBULA & FAINT OBJECTS SECTION | |
| 7-14-21 28 | Mr M Cook | , Ipswich, IP4 5PZ | |
| | Mr D Payne | Wickham Market, IP13 0SD | |
| Thursdays | from 7.30pm | OBSERVATORY VISITS FROM OUTSIDE GROUPS | |
| 1-8-15 22-29 | Mr P Richards | , Nacton, Ipswich, IP10 0HS | |
| Fridays | from 7.30pm (may be postponed to Saturday) | PLANETARY & LUNAR SECTION | |
| 2-9-16 23-30 | Mr P Richards | (Address above.) | (Number above) |
| | Mr G Marriott | Ipswich IP4 4JB | |

All members are welcome to come but, on nights other than Wednesdays please check with directors that the observatory will be open. Directors will also be able to tell you if a group visit is taking place. All of the sections observe anything of interest but the title of each section suggests a popular subject.

Lectures and other events:

**Committee Meeting**

The next committee meeting will be on Saturday 1st October from 7.30. As usual this is an open meeting and any member is welcome to attend.

1994 COMMITTEE

| | | | Home Phone: | Work Phone: |
|---|---|---|---|---|
| CHAIRMAN | D Payne | (Address above) | | |
| MEMBERSHIP RENEWALS | M.Cook | (Address above) | | |
| MEMBERSHIP SECRETARY | R.Gooding | | | |
| SECRETARY | R Gooding | , Ipswich, IP1 6AE | | |
| TREASURER | M Nicholls | , Capel St Mary, Ipswich, IP9 2EX | | |
| MAINTENANCE CO-ORD | M Cook | (Address above) | | |
| JOURNAL CO-ORDINATOR | E Sims | , Ipswich, IP1 4HA | | |
| PUBLICITY & VISIT CO-ORD | P Richards | (Address above) | | |
| EQUIPMENT CURATOR | M.Harlow | Trimley | | |
| SPECIAL EVENTS CO-ORD | P.Richards | | | |
| LIBRARIAN &COMP SOFTWARE | J.Appleton | Ipswich IP3 0QJ | | |