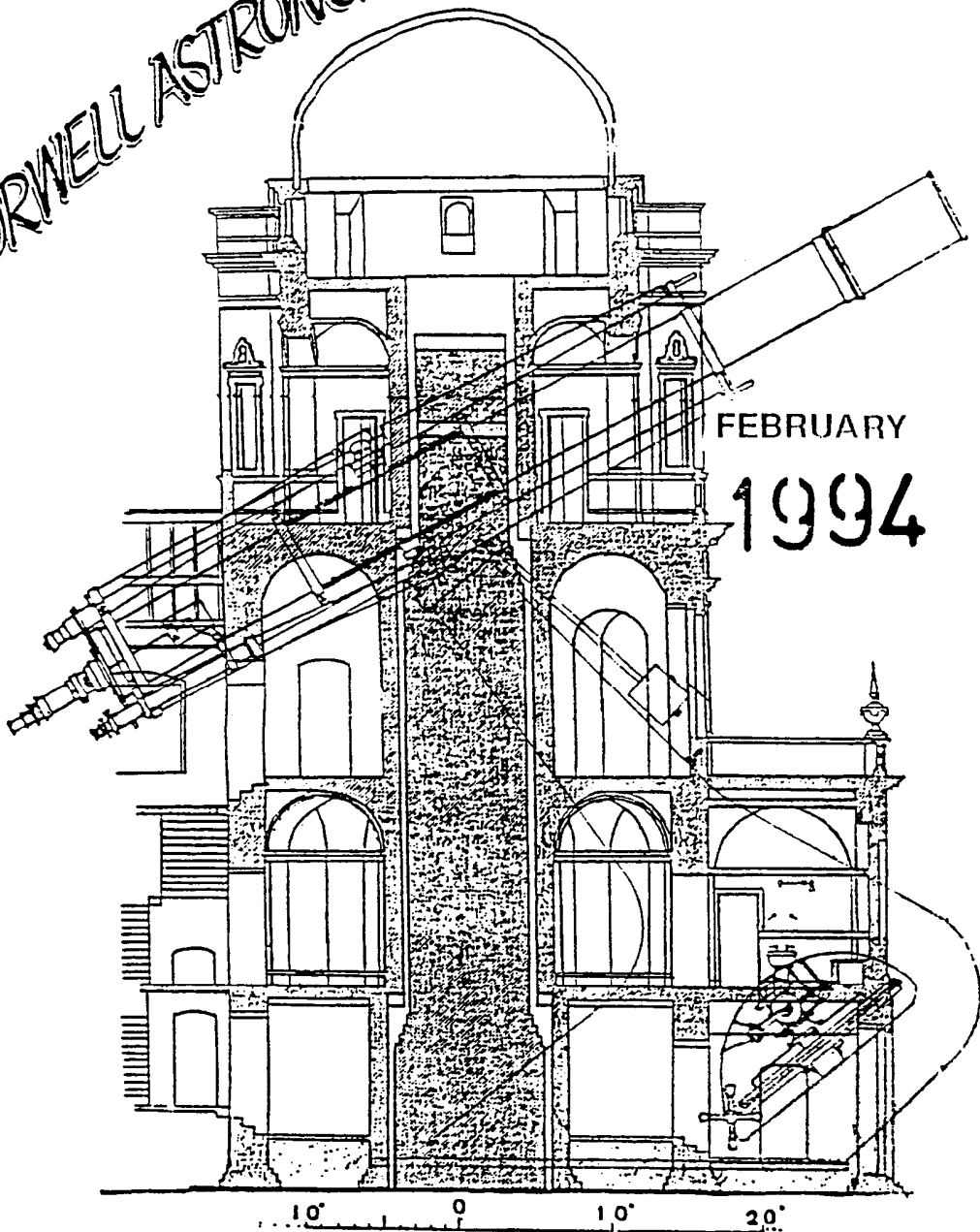


ORWELL ASTRONOMICAL SOCIETY IPSWICH



FEBRUARY
1994

SOCIETY NEWS

1 1994 ANNUAL SUBSCRIPTIONS

The annual subscriptions are due on January 1st 1994. The rates for the new year will remain at the 1993 levels.

Rates for 1993-

JUNIOR & OAP	£7.50	(under 18 or in full time education)
ADULT	£10.50	
FAMILY	£12.00	

Cheques & P.O.'s made payable to the ORWELL ASTRONOMICAL SOCIETY (IPSWICH) together with this form to Membership Secretary:-

Mr. D. Barnard
[Redacted]
Ipswich

2 Committee Meeting

The next committee meeting will be on Saturday 12th February, from 7.30. As usual this is an open meeting and any member is welcome to attend.

3 February Lecture Meeting

* The February lecture meeting will be held on Friday *
* 11th at 8.00 pm, at the Friends Meeting House *
* Fonnereau Road. *
* *
* The speaker is Mr. Gerry Workman, who will be talking about Mars. *
* *

4 List of Events For 1994

- i) Astrofest 4 & 5-2-94
- ii) Lecture Meeting Fonnereau Road 11-2-94
Mr. G. Workman Talk on Mars
- iii) CUAS/BAA Variable Star Meeting Cambridge 19-2-94

- iv) Lecture Meeting Fonnereau Road Film Night 11-3-94
- v) BAA Winchester Weekend 25-3-94
- vi) Open Weekend ? To be arranged April 15,16,17
- vii) Lecture Meeting Fonnereau Road.
Mr.Ron Mearthur Talk on Radio Astronomy 6th or 20th May? 13-5-94
- viii) Oxford Weekend 13-5-94
- ix) Trip to Greenwich in May ?
- x) Parents Day 18-6-94
- xi) FAS Convention Cambridge 24-9-94
- xii) Bury Star Party. We have been asked to help
organise a star party as part of the
Bury St Edmunds Time & Motion Festival.
Probable date Saturday 10-12-94
- xiii) Christmas meal. Sometime in December 14-12-94

5 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	BBC2 24.00	
	1st showing	Repeat	
	Sunday	Thursday	
TV1	20-2-94	3-3-94	Our Invisible Sun
TV2	20-3-94	24-3-94	Good Seeing
TV3	24-4-94	28-4-94	Cosmic Cycling
TV4	22-5-94	26-5-94	Venus Unveiled
TV5	19-6-94	23-6-94	Design for an Alien World
TV6	17-7-94	21-7-94	Mapping the Milky Way
TV7	14-8-94	18-8-94	Jets & Black Holes
TV8	11-9-94	15-9-94	Cosmology on Trial

6 National Astronomy Week

There is no need to panic as this event will not be until 1996. The proposed dates are between 21-28th of September, and will commemorate the 150 anniversary of the discovery of Neptune

7 The New Headmaster of Orwell Park School

Ian Angus has been the Headmaster of Orwell Park School for the last 14 years, 1979-1993. Ian showed more interest in our endeavours at repairing and restoring the observatory, than in actually using the telescope. He was always very appreciative of our restoration efforts, and gave valued assistance when asked.

This included both decorating materials, and allowing us to occasionally take over a large part of the school for many Open Days, held in the past. The school now has an asset, that without our society's intervention, would probably still be completely derelict. Ian and his wife have taken up a post of joint heads of another prep. school, Windlesham.

The new Headmaster Elect is Mr. Andrew Auster, he will be taking up his new post later this year.

8 1994 Committee

Alan Smith, Dave Barnard and John King have decided to stand down from the committee for 1994.

The 1994 committee will be :-

Dave Payne
Roy Gooding
Mike Nicholls
Martin Cook
Eric Sims
Pete Richards
Mike Harlow
James Appleton

One place remains to be filled

NIGHT SKY

All times GMT

SUN

Rises approximately at 07.00 to 06.49
Sets approximately at 16.45 to 17.36

MOON



3 rd

10 th

18 th

26 th

MERCURY Mercury will be in the evening sky this month. Greatest eastern elongation is on the 4th (18°). Mag 0.8

VENUS Venus will be too close to the sun for most of the month. by the end of the month it will be moving into the evening sky. Mag.-3.8

MARS Mars will be to close to the sun this month, and remains within the sun's glare.

JUPITER Jupiter will be rising at about 00.30 in mid month. Mag. -2.1.

SATURN Saturn will in conjunction with the sun on the 21st.

URANUS Uranus is not visible this month.

NEPTUNE Neptune is also not visible this month.

R. Gooding

Saturn - A View From The Past

D B Payne

During the autumn months Saturn has been the only planetary object of note in the evening skies and although it is still fairly low in the southerly part of it's orbit, some fine views of the rings could be obtained.

Every one is now familiar with the magnificent views of the rings sent back by the space crafts Pioneer 11, in August/September 1979, Voyager 1, in October/November 1980 and Voyager 2, in August/September 1981. However there is no substitute to observing the rings directly through a telescope and gazing at one of the most spectacular sights in the heavens.

When the space probes showed that the rings were composed of hundreds of tiny ringlets, it seemed to come as a surprise to the scientific community. However I could remember reading a book about Saturn in the early 60's in which I could recall observers of Saturn claiming that the rings were composed of a great number of narrow ring. A few month ago I discovered that this book is held in our library and is titled "The Planet Saturn" by A.F.O'D Alexander It was donated to the library by Mike Harlow in 1988. This book is a record of the history of the observation of Saturn up to about 1960. The book makes fascinating reading and has many references to subdivisions in the rings by well known and experienced observers.

Suspensions of subdivisions within the rings were triggered off by theoretical considerations by Laplace in 1785. Prior to this time it was assumed that the rings were solid. Laplace was concerned about the stability of a solid ring and proposed that to be solid they would need to be composed of many thin narrow rings. William Hershall who was convinced of the solidity of Saturn's ring did not believe in the subdivisions and did not generally observe any except for Cassini's division. However in his observing records he does on four occasions refer to additional markings on ring B.

Observations of ring subdivisions seem to have started in the early 19th century. In 1925 Henry Kater vice president and treasurer of the Royal Society was testing a new 6.25 inch reflector and observed several divisions in ring A "I fancied that I saw the outer ring separated by numerous dark divisions, extremely close, one stronger than the rest dividing the ring about equally" In 1851 a remarkable observation by Charles W Tuttle records that under some exceptionally clear conditions he saw fine subdivisions in ring B, he found the ring to be "Minutely subdivided into a great number of narrow rings". They were also observed by two other observers observing with him at the same time. Tuttle's later description was that "the divisions were not unlike a series of waves; The depressions corresponding to the spaces between the rings, while the summits represented the narrow bright rings themselves. The rings and the spaces between them were of equal breadth...". Dawes and Lassell were also recording subdivisions at this time.

An even more remarkable observation from the space probes was the radial spokes that appeared on ring B. These are very short lived features that form and disappear in a matter of hours. In 1896 the famous planetary observer E M Antoniadi observed unusual markings on both bright rings - subdivisions in ring B and white spots separated by dusky radial streaks on ring A. At the time these were thought to be illusory, but were they? The sketch made by Antoniadi is copied below and shows the spoke like markings seen on ring A, very reminiscent of the spokes seen on the voyager images on ring B. Could they have been real?

Saturn is beautiful object for observation it is well worth using high powers on good clear nights and you may be surprised at the detail that can be seen under those rare moments of exceptional seeing!

PROGRAMME FOR FEBRUARY

DAYS & DATES	DIRECTORS	SECTION & ADDRESSES	PHONE INC. STD CODE
Mondays	from 7.30pm	GENERAL OBSERVATION SECTION	
7-14-21 28	Mr J King	[REDACTED] Felixstowe, IP11 9LQ	[REDACTED]
Tuesdays	form 7.30pm	GENERAL OBSERVATION SECTION	
1-8-15 22	Mr D Barnard Mr J King	[REDACTED] IP3 8RN (Address above.)	(Number above)
Wednesdays	from 8.00pm	NEBULA & FAINT OBJECTS SECTION	
2-9-16 23	Mr M Cook Mr D Payne	[REDACTED] Ipswich, IP4 5PZ [REDACTED], Wickham Market, IP13 0SD	[REDACTED]
Thursdays	from 7.30pm	OBSERVATORY VISITS FROM OUTSIDE GROUPS	
3-10-17 24	Mr P Richards	[REDACTED], Nacton, Ipswich, IP10 0HS	[REDACTED]
Fridays	from 7.30pm (may be postponed to Saturday)	PLANETARY & LUNAR SECTION	
4-11-18 25	Mr P Richards	(Address above.)	(Number above)

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 12 th February
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)	[REDACTED]	[REDACTED]
VICE CHAIRMAN & MEMBERSHIP SECRETARY		[REDACTED]	[REDACTED]
SECRETARY	R Gooding [REDACTED] Ipswich, IP1 6AE	[REDACTED]	[REDACTED]
TREASURER	M Nicholls [REDACTED] Capel St Mary, Ipswich, IP9 2EX	[REDACTED]	[REDACTED]
MAINTENANCE CO-ORD	M Cook (Address above)	[REDACTED]	[REDACTED]
JOURNAL CO-ORDINATOR	E Sims [REDACTED] Ipswich, IP1 4HA	[REDACTED]	[REDACTED]
PUBLICITY & VISIT CO-ORD	P Richards (Address above)	[REDACTED]	[REDACTED]
EQUIPMENT CURATOR		[REDACTED]	[REDACTED]
SPECIAL EVENTS CO-ORD		[REDACTED]	[REDACTED]

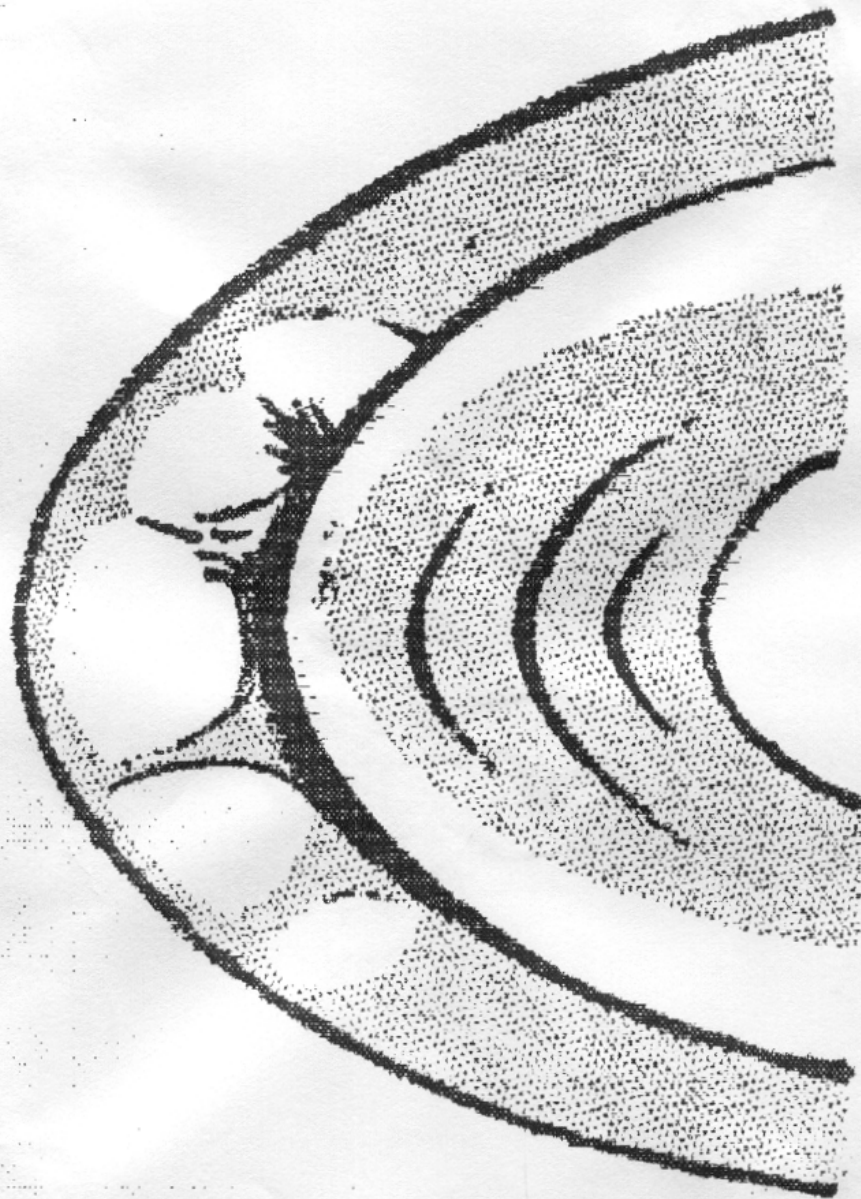


Fig 1. Copy of Antoniadi's sketch of the ring markings observed 18th April 1896.