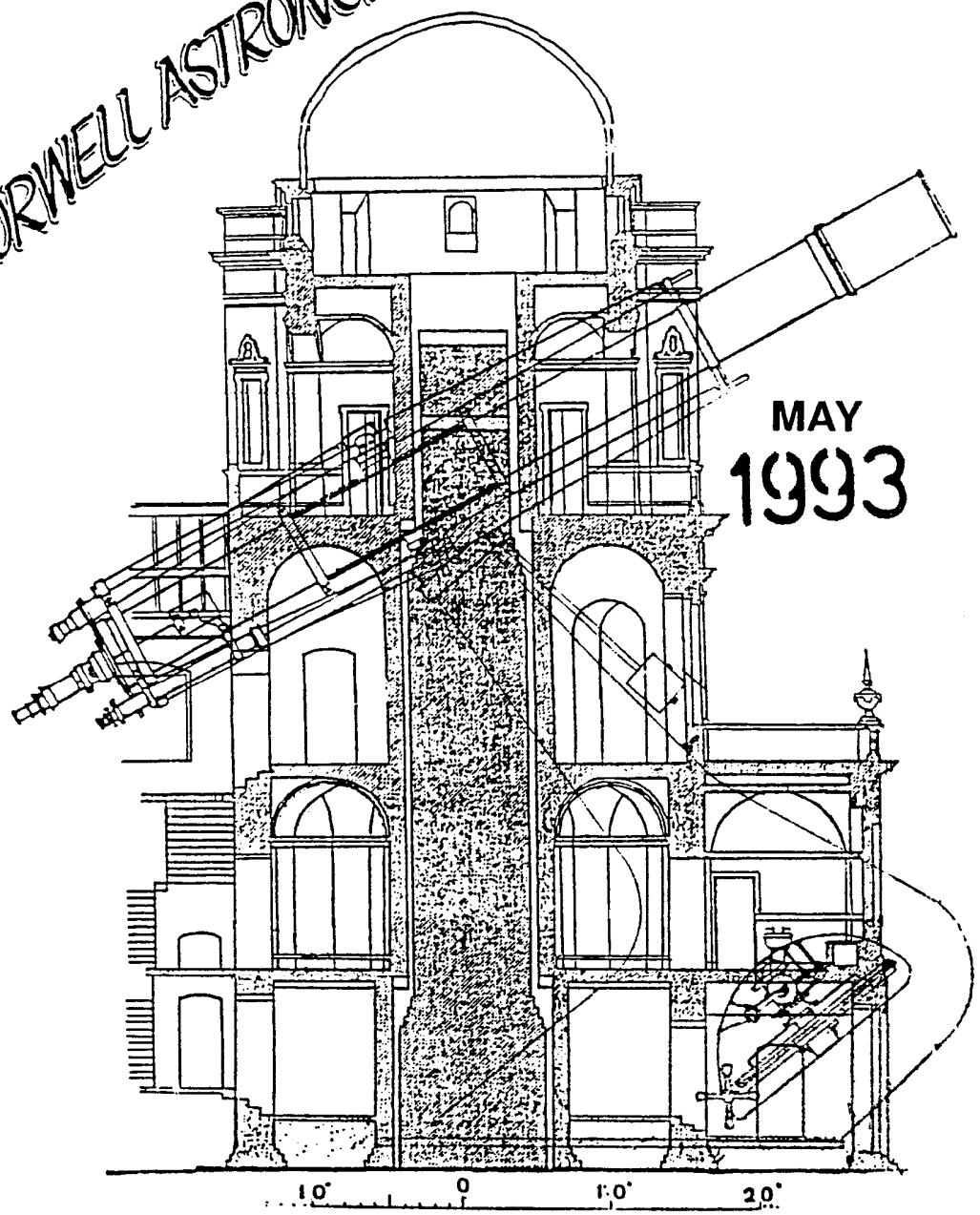
ORWELL ASTRONOMICAL SOCIETY IPSWICH



MAY

1993

SOCIETY NEWS

1 COMMITTEE MEETING

The next committee meeting will be on Saturday 22nd May, with a start at 7.30pm in the club room. As usual this is an open meeting and any member who wishes to attend will be welcome.

NIGHT SKY

All times GMT

SUN Rises approximately between 04.00 to 03.30
Sets approximately between 19.30 to 20.30

MOON

6 th **13 th** **21 st** **28 th**

MERCURY Mercury will be at superior conjunction on the 16th, before reappearing in the evening sky.

VENUS Venus will be visible in the morning sky. It will be rising at about 02.50 in mid month. Mag -4.4

MARS Mars will be visible most of the night, setting at about 01.00 in mid month. It will be close to M44 on the 12th. Mag. 1.2

JUPITER Jupiter is still well placed for observing all evening, until it sets at about 03.00 in mid month. Mag. -2.3

SATURN Saturn will be rising at about 01.30 in mid month. It is near the border of Aquarius and Capricornus. Mag. 0.9

URANUS Uranus will be rising at about 00.00, in mid month. Mag. 5.7

NEPTUNE Neptune is close to Uranus in the sky (1° apart) and will be rising at about the same time. Mag. 7.9

R.Gooding

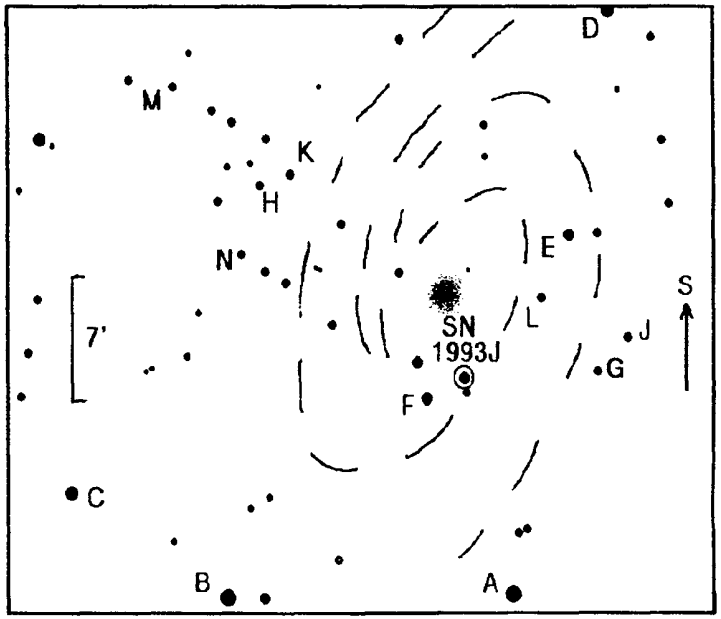
Supernova 1993J In M81

David Payne

A Supernova has been discovered by F. Garcia, Lugo, Spain on 28th March 1993 in the conveniently placed Messier object M81. It is situated about 5' south of the central nucleus and is easily identified as the right hand member of a small triangle of 11th - 12th magnitude stars (see chart below showing position and comparison stars - source BAA Circular C725, April 1st '93).

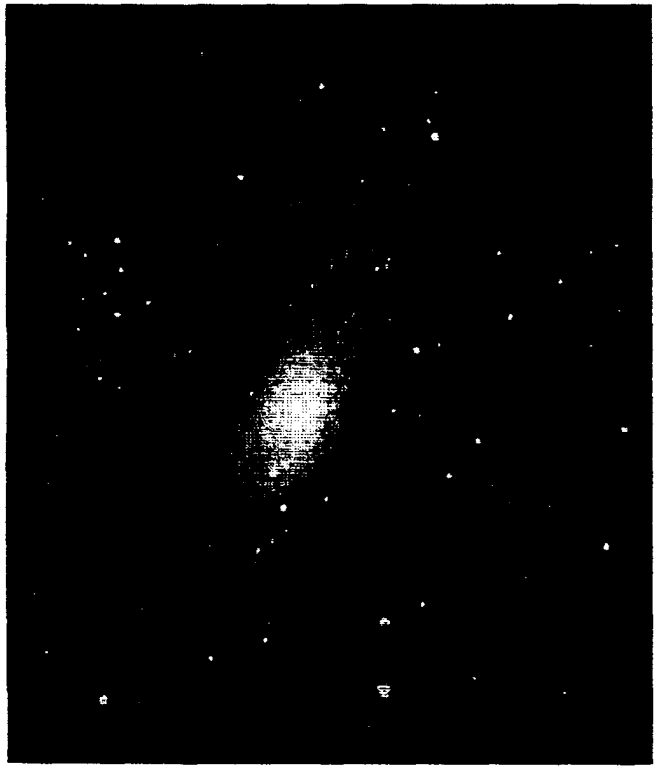
At this time of the year M81 is near the Zenith and is in an excellent position for observing. It can be found about 10^{0} north west of Alpha Ursae Majoris and 2^{0} east southeast of 24 Ursae Majoris (see chart below).

A	8.9
B	9.4
C	10.37
D	10.7
E	11.8
F	11.91
G	12.45
H	12.89
J	13.00
K	13.78
L	14.10
M	14.77
N	14.99



On good nights M81 is an easy spiral galaxy in Ursa Major with the irregular galaxy M82 nearby, about 38' to the north. Using a wide field eyepiece both objects can be placed in the same field of view and form a splendid pair even in small telescopes. Both galaxies are about 7 million light years away. M81 is an almost face on, regular spiral galaxy with a bright and condensed central nucleus. This nucleus is usually lost on photographs due to over exposure (see below) but is clearly seen in small telescopes.

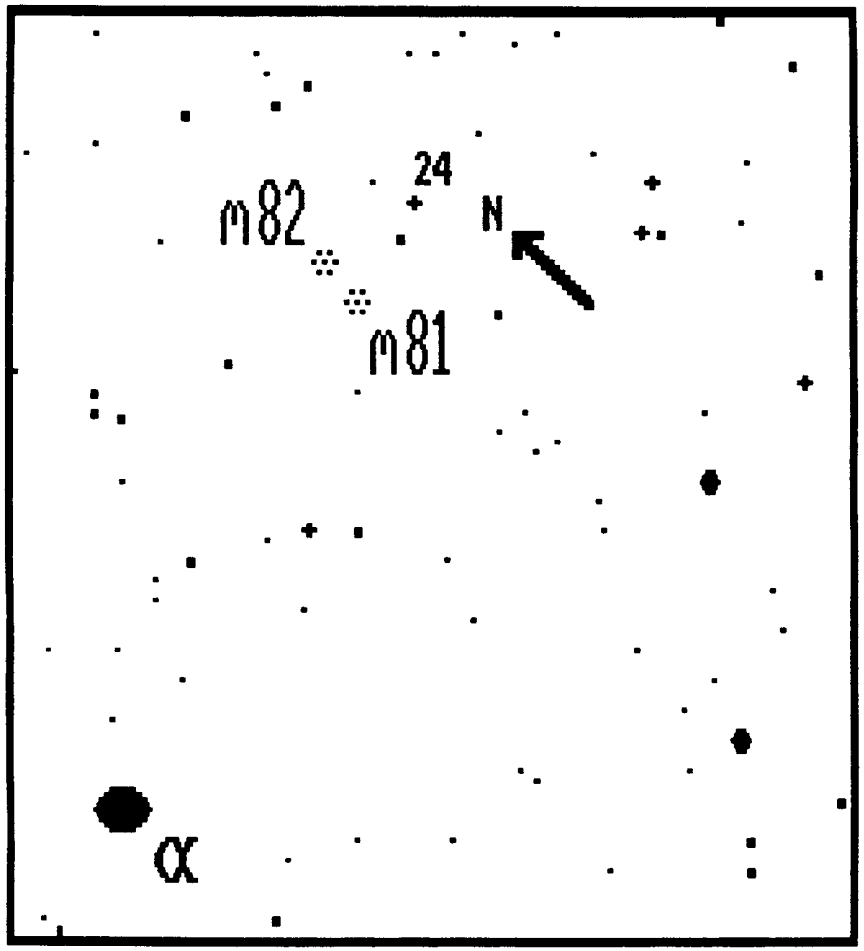
The supernova is to be found south of this nucleus and clearly separated from it. Although the supernova is lying within the spiral arms surrounding the nucleus, these are too faint to be seen in small telescopes.



M81

At discovery on March 26.9, the supernova was estimated to be magnitude 14. The first observation at Orwell Park was made on 2nd April at 11pm BST by myself, Gary Marriot and Pete Richards. At this time we estimated the magnitude to be 11.8.
I have only been able to make two other observations since then one on 14th April at 10:30pm BST, estimated magnitudeT 10,6

and the other on 21st April at 11pm BST, estimated magnitude 10.7. For the first observation comparison stars E (mag 11.8) and F (mag 11.91) were used. On this occasion the supernova appeared to be fainter than star F and about the same



brightness (or possibly very slightly brighter) as star E. For the latter two observations comparison stars C and D were used to estimate the magnitude. On the both occasions the supernova was estimated to be fainter than star C (mag 10.37). On the 14th April observation the supernova appeared slightly brighter than star D while on the 21st April it appeared to be equal to star D suggesting that fading may have occurred.

Any observations and brightness estimates should be made using only those comparison stars indicated in the BAA circular chart reproduced above. Observations should be sent to Guy Hurst, [redacted], Kempshott Rise, Basingstoke, Hants, RG22 4PP. I would also be very interested in receiving any observations from members so that we could plot our own light curve over the coming weeks. Please also send any observations to D Payne, [redacted], Wickham Market, Suffolk, IP13 OSD. Alternatively bring them up to the observatory at Orwell Park!

2 OPEN WEEKEND

The Open Weekend began quietly, on the Friday evening. The weather was fine with a few clear patches enabling the Moon and Jupiter to be seen between the clouds. An estimated 30 visitors arrived this first evening. The second evening was completely overcast, with the expected result that visitors were very few in number. Those that arrived were entertained with a talks on the history of the observatory and a slide show.

On the Sunday evening the weather pulled out all of the stops with continuous clear skies. An estimated 100 visitors arrived during the two hours we were open. The dome was never empty all evening. Several telescopes were also in operation on the balconies.

The weekend events increased society funds by over £80.

LYRA

Lyra is a small but very striking constelationcontaining Vega the brightest star of the northan sky which together with ε and ζ, forms a small equilateral triangle.

The ring nebula M57 is about halfway on the line conecting the stars β and γ. It can only be seen through a telescope and is about 1,700 light years from Earth.

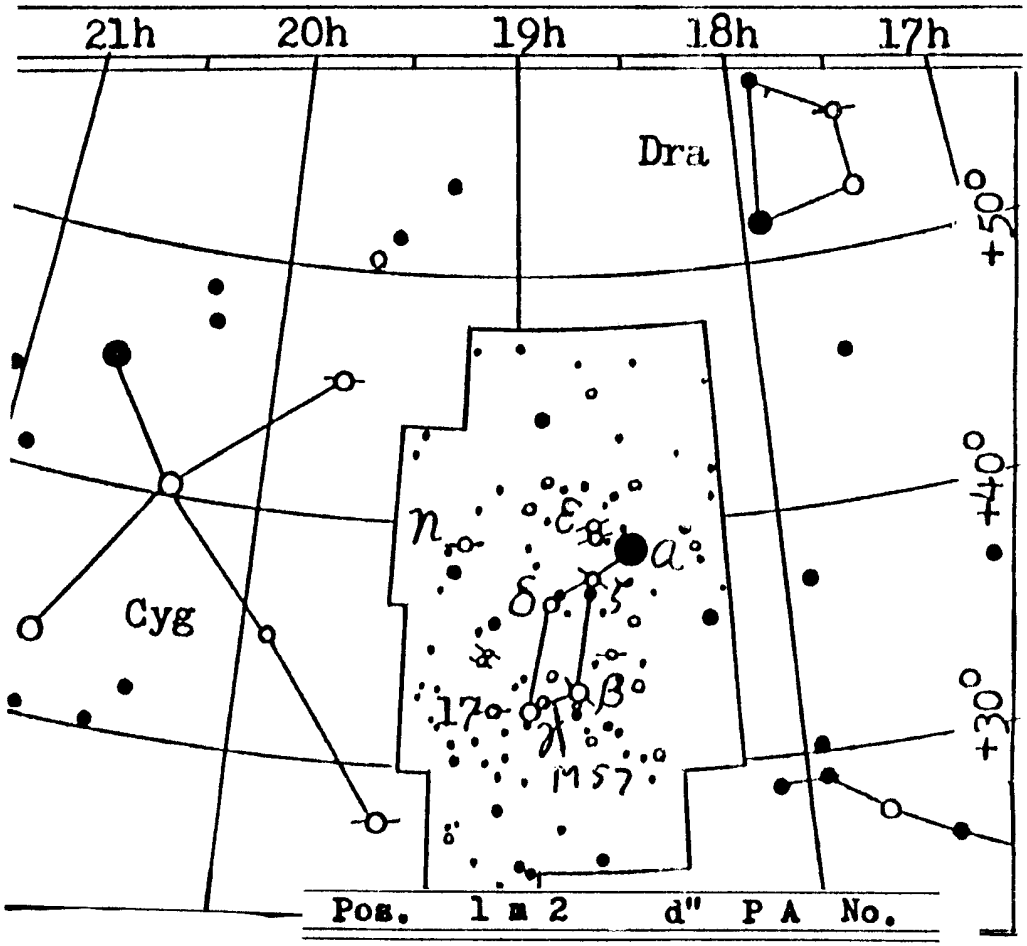
ε **Famous double-double rates as finest of all multiples. All stars appear as white.**

ζ **Topaz, green.**

β **Eclipsing variable, mag 3.3 to 4.2 in 12.9 days.**

α **VEGA: Dazzling b-w diamond.**

LYRA



Pos.	l m 2	d"	P A	No.
184034	6.1-7.8	25.1	83	E2372
4239	4.6-4.5	207.	172	ε 1,2
	6.0-5.0	2.8	2	ε 1
	5.1-5.3	2.3	101	ε 2
4337	4.2-5.8	43.7	150	ζ 1,2
4833	var-7.8	46.6	149	β 1,2
190532	5.0-9.4	3.7	308	17
0634	6.9-8.4	13.5	270	E2470
0734	6.8-8.2	16.7	262	E2474
1239	4.4-8.7	28.2	82	η

Double Stars

PROGRAMME FOR MAY

DAYS &DATES	DIRECTORS	SECTION & ADDRESSES	PHONE INC. STD CODE
Mondays	from 7.30pm	GENERAL OBSERVATION SECTION	
3-10-17-24-31	Mr R Newman	[redacted], Felixstowe, IP11 9DY	[redacted]
	Mr J King	[redacted], Felixstowe, IP11 9LQ	
Tuesdays	form 7.30pm	GENERAL OBSERVATION SECTION	
4-11-18-25	Mr R Newman	(Address above.)	(Number above)
	Mr J King	(Address above.)	(Number above)
Wednesdays	from 8.00pm	NEBULA & FAINT OBJECTS SECTION	
5-12-19-26	Mr M Cook	[redacted], Ipswich, IP4 5PZ	[redacted]
	Mr D Payne	[redacted], Wickham Market, IP13 0SD	
Thursdays	from 7.30pm	OBSERVATORY VISITS FROM OUTSIDE GROUPS	
6-13-20-27	Mr P Richards	[redacted], Nacton, Ipswich, IP10 0HS	[redacted]
	Mr G Marriott	[redacted], Ipswich, IP4 4JB	
Fridays	from 7.30pm (may be postponed to Saturday)	PLANETARY & LUNAR SECTION	
7+14-21-28	Mr P Richards	(Address above.)	(Number above)
	Mr R A Lobbett	[redacted], Felixstowe, IP11 8UJ	[redacted]
	Mr G Marriott	(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 is on Saturday 22nd May at 1930 in the club room as usual this is an open meeting so all members are welcome to attend.

1993 COMMITTEE

			Home Phone:	Work Phone:
CHAIRMAN	D Payne	(Address above)	[redacted]	
VICE CHAIRMAN & MEMBERSHIP SECRETARY	D Barnard	[redacted], Ipswich, IP3 8RN		
SECRETARY	R Gooding	[redacted], Ipswich, IP1 6AE		
TREASURER	M Nicholls	[redacted], Capel St Mary, Ipswich, IP9 2EX		
MAINTENANCE CO-ORD	M Cook	(Address above)		
JOURNAL CO-ORDINATOR	E Sims	[redacted], Ipswich, IP1 4HA		
PUBLICITY & VISIT CO-ORD	P Richards	(Address above)		
EQUIPMENT CURATOR	J King	(Address above)		
SPECIAL EVENTS CO-ORD	A Smith	[redacted], Ipswich, IP4 5RZ		