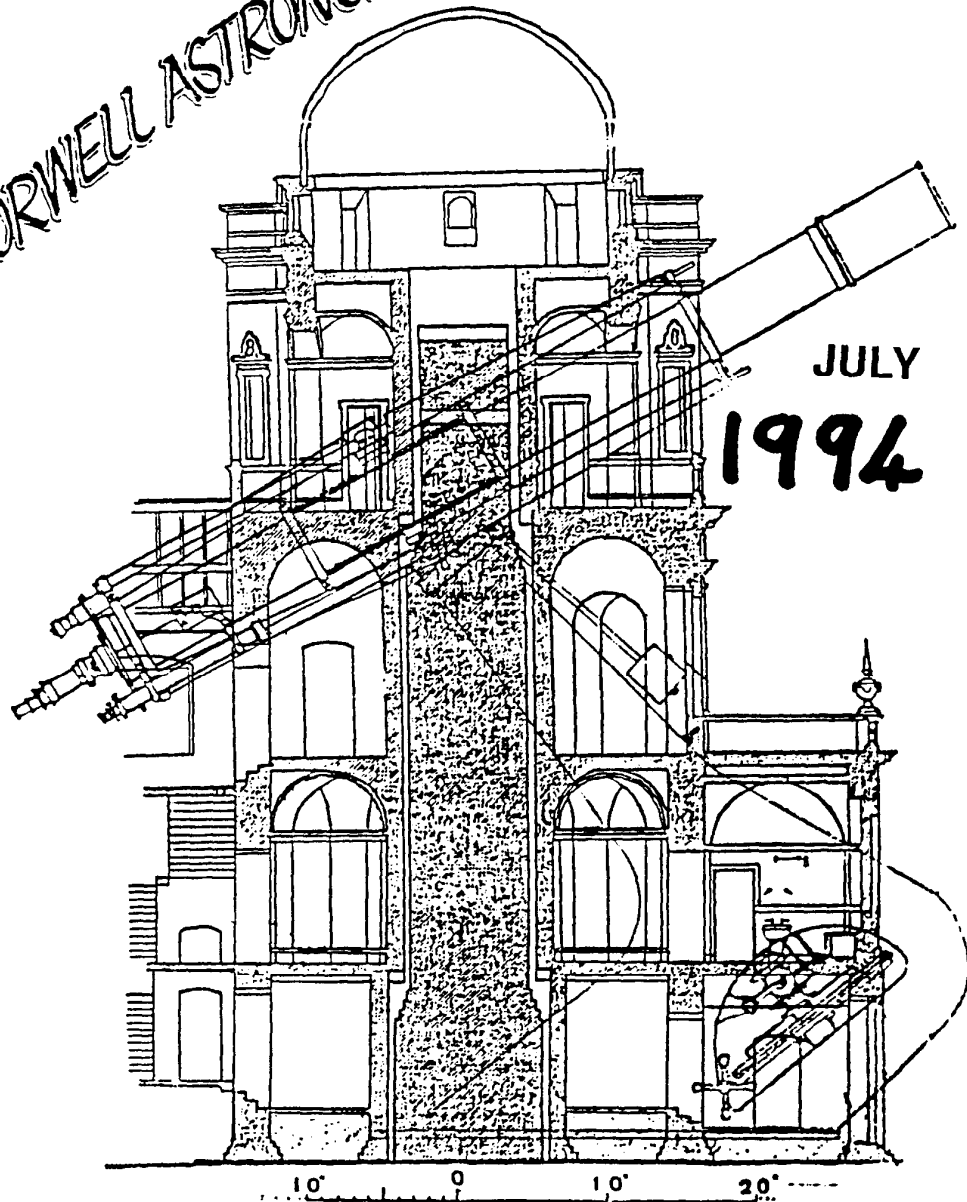


ORWELL ASTRONOMICAL SOCIETY IPSWICH



JULY
1994

SOCIETY NEWS

1 Committee Meeting

The next committee meeting will be on Saturday 30th July, from 7.30. As usual this is an open meeting and any member is welcome to attend.

2 List of Events For 1994

- i) Norwich A.S. are holding open days at their new site at Seething. Numbers are limited, with tickets costing £3.50. 2/3-7-94
- ii) FAS Convention Cambridge 24-9-94
- iii) The annual Open Weekend will be held in the autumn.
- iv) 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
- v) Christmas meal. Sometime in December 14-12-94

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	BBC2 24.00	
	1st showing	Repeat	
	Sunday	Thursday	
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

NIGHT SKY

All times GMT

SUN

Rises approximately at 03.47 to 04.22
Sets approximately at 20.20 to 19.50

MOON



8th



16th



22nd



30th

MERCURY Mercury will be in the morning sky this month. It will be close to the sun, making it difficult to see.

VENUS Venus will be visible in the western sky after sunset. It will be setting about 21.53 in mid month. Mag. -3.9.

MARS Mars will be rising at 00.50 in mid month. Mag. 1.4

JUPITER Jupiter will be visible in the evening sky, setting at 23.35 in mid month. Mag. -1.7

SATURN Saturn will rising at 21.59 in mid month. Mag. 1.0

URANUS & Neptune Both planets are in Sagittarius, and will be visible all night. They will be setting at 04.15 and 04.08 respectively.

R. Gooding

SUN SEA AND STARS

By Ian Swann

The first holiday for five years had to have something special for all of us, so I suggested to my family that we go to COAA in the Algarve. COAA stands for CENTRO DE OBSERVACAO ASTRONICA NO ALGARVE. This is a centre for amateur astronomers but is within easy driving distance of all the attractions that southern Portugal has to offer. My wife and two children had never been abroad before, and the thought of flying off to a warm sunny land for two weeks excited us all, but for me the idea of clear dark skies, and the use of the 12" Newtonian with my CCD camera was the main attraction.

I have developed a CCD camera based on the new Texas 255 chip, and have been frustrated by the lack of clear nights here in Britain, so COAA seemed a great place to try it out.

The decision having been taken we paid the deposits, bought some suitable clothes and studied the weather forecasts intently. All was set for us to go on the 16th of May.

All went well with our outward journey. My wife and children enjoyed the experience of their first flight, although my 4 year old son was a little disappointed the aeroplane did not fly upside down at least once along the way. As we disembarked, the warm local air made a pleasant change from the cool clinical atmosphere of the aircraft. We retrieved our luggage, and caught the shuttle bus to pick up the hire car. The one hour drive to COAA was made easy by following the map and instructions sent to us from COAA, but I was pleased it was still daylight as we negotiated the narrow country lanes close to COAA.

On arrival at Casa Adelina (COAA) we were warmly welcomed by Bev and Janet Ewen-Smith, the English couple who own and run the centre. Casa Adelina is Bev and Janet's home, and it is to their great credit that they open up so much of it to their guests. The house is divided into apartments each with its own toilet and shower facilities. The main living/dining area is shared by all, including the Ewen-Smiths. Bev also has an office adjoining the house where he has a (PC) which he makes available to guests who wish to use it, for processing their CCD images for instance. We were soon made at home in the north apartment. This had two bedrooms each with twin beds, and a toilet/shower room. Each of the bedrooms had a door leading to the wonderfully large balcony area, where the children could safely play. As it was now quite late we settled down for the night in anticipation of the sunny days, and dark nights, to follow.

The following day we sat down to a continental breakfast and were introduced to the other guests, a very pleasant retired couple from the lake district. After breakfast Bev showed me the astronomical facilities at COAA. There are two 12" f5 Newtonian reflectors. One is on a driven equatorial mount, housed in a permanent dome. The other has a Dobsonian mount and can be placed on one of the two paved and levelled circles adjacent to the dome. The third telescope a 4" refractor on a super Polaris mount can also be placed on one of the paved circles and can be used for piggy back photography as well as conventional observing. The site has clear views of the horizon from the north east round through east, south, west and nearly to the north west, with slightly less sky available in the remainder. The southern horizon is 15 degrees lower than in central Britain, so many objects not visible from home can be seen from COAA. Light pollution is quite low but unfortunately is increasing year by year.

The number of clear observing nights at COAA is very high, and it is very unusual to have a full week without at least one or two good clear nights. Well our first week was unusual! I only managed to capture two CCD images through broken cloud in seven nights. The weather gradually worsened towards the end of the first week and both my family and I were feeling very disappointed. A point to remember about the Algarve, is that because of the predominantly good weather life is conducted almost entirely in the open air, and when it does rain, there is very little to do. Janet was keeping the children cheerful by leaving little treats for them every day, while Bev was trying hard to make his satellite weather pictures show some encouragement, but it all looked very gloomy. We were all but ready to give up, cut our losses, and come home, when on the eighth day we awoke to glorious blue skies and dazzling sunshine. The Algarve is transformed into a wonderful glowing place when the sun shines. Thankfully the good weather lasted for the rest of our holiday and a great time was had by all.

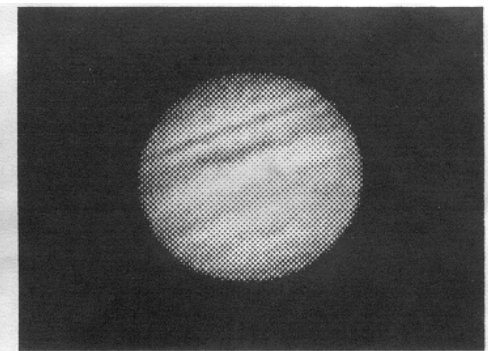
I was able to fully test the prototype CCD camera as I had intended. Unfortunately I had the moon to contend with in the second week but this did not prove to be too obtrusive, as you can see from the images. The images were captured on a laptop PC via the centronics printer port connected to the camera electronics. At first Bev and I had a little trouble with focusing the camera due to the camera mounting. With this overcome we soon settled into a smooth pattern of "focus aim shoot" as it were. I have to thank Bev very much for his excellent knowledge of the sky, his brilliant ability to find and centre objects in the scope, and his patient guiding of the scope while I drove the computer.

The images were later processed on Bev's desk top PC which was much faster than the laptop I had taken. Bev also took a great interest in the image processing and with a little help from me and Mr Buil's book, he wrote a program to deconvolve my images. The two sets of images of M57 and M5 show the improvement most strikingly.

Despite the first dreadful week the holiday was a great success both for sun lovers, and those bathing in the glories of more distant stars!



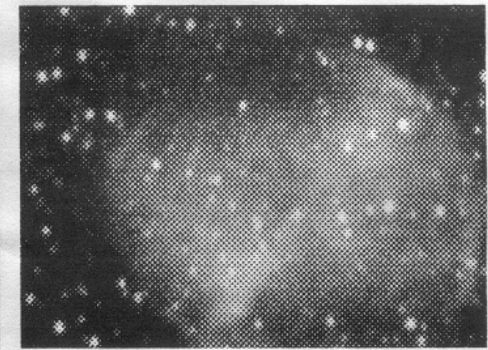
NGC5128



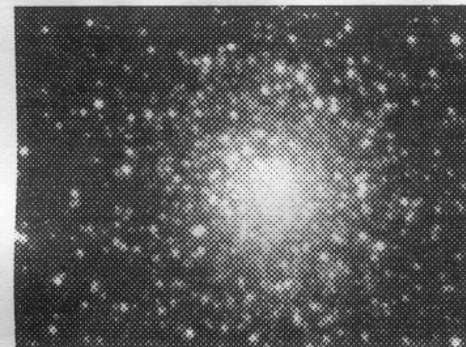
JUPITER



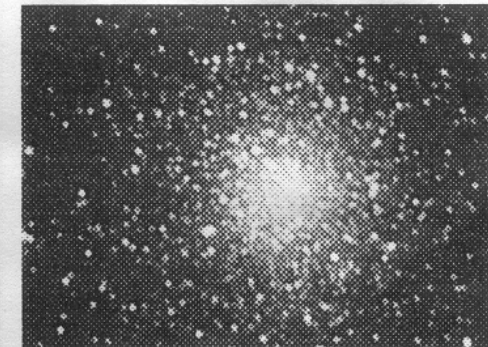
M104



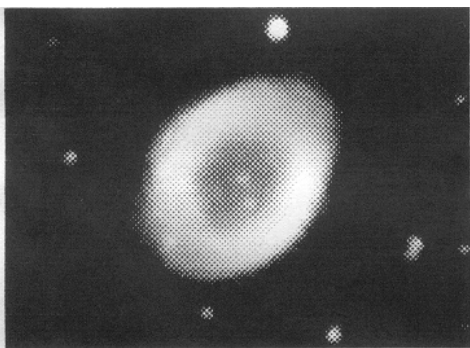
M27



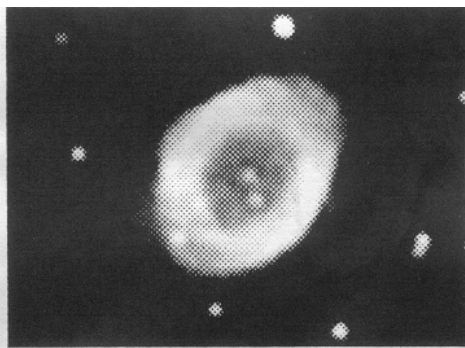
M5



M5 DECONVOLVED



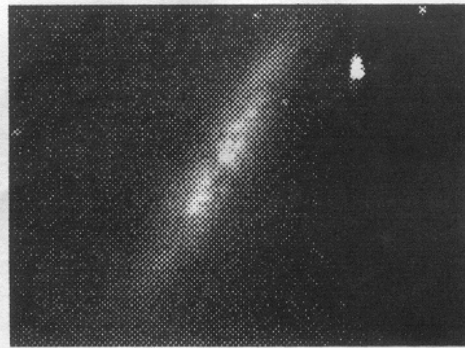
M57



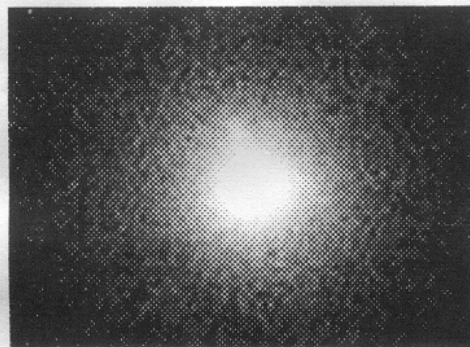
M57 DECONVOLVED



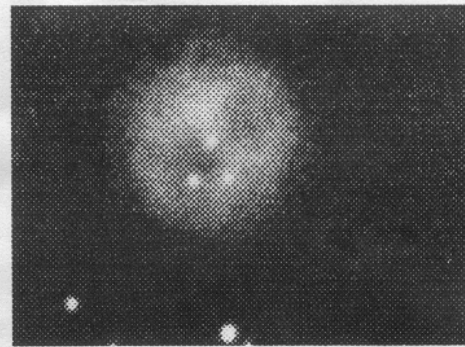
NGC4565



M82



M87



M97

PROGRAMME FOR JULY

DAYS & DATES	DIRECTORS	SECTION & ADDRESSES	PHONE INC. STD CODE
Mondays	from 7.30pm	GENERAL OBSERVATION SECTION	
4-11-18-25	Mr J King	[REDACTED], Felixstowe, IP11 9LQ	[REDACTED]
Tuesdays	form 7.30pm	GENERAL OBSERVATION SECTION	
5-12-19-26	Mr D Barnard	[REDACTED] IP3 8RN	(Number above)
	Mr J King	(Address above.)	(Number above)
Wednesdays	from 8.00pm	NEBULA & FAINT OBJECTS SECTION	
6-13-20-27	Mr M Cook	[REDACTED], Ipswich, IP4 5PZ	[REDACTED]
	Mr D Payne	[REDACTED], Wickham Market, IP13 0SD	[REDACTED]
Thursdays	from 7.30pm	OBSERVATORY VISITS FROM OUTSIDE GROUPS	
7-14-21-28	Mr P Richards	[REDACTED], Nacton, Ipswich, IP10 0HS	[REDACTED]
Fridays	from 7.30pm (may be postponed to Saturday)	PLANETARY & LUNAR SECTION	
1-8-15-22	Mr P Richards	(Address above.)	(Number above)
29	Mr C Marriott	[REDACTED] Ipswich IP4 4JB	[REDACTED]

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 held on Saturday 30th July. 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)	[REDACTED]	[REDACTED]
MEMBERSHIP RENEWALS	M. Cook (Address above)	[REDACTED]	[REDACTED]
MEMBERSHIP SECRETARY	R. Gooding	[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	M. Harlow [REDACTED] Trimley [REDACTED]	[REDACTED]	[REDACTED]
SPECIAL EVENTS CO-ORD	P. Richards	[REDACTED]	[REDACTED]
LIBRARIAN & COMP SOFTWARE	J. Appleton [REDACTED] Ipswich IP3 0QJ	[REDACTED]	[REDACTED]