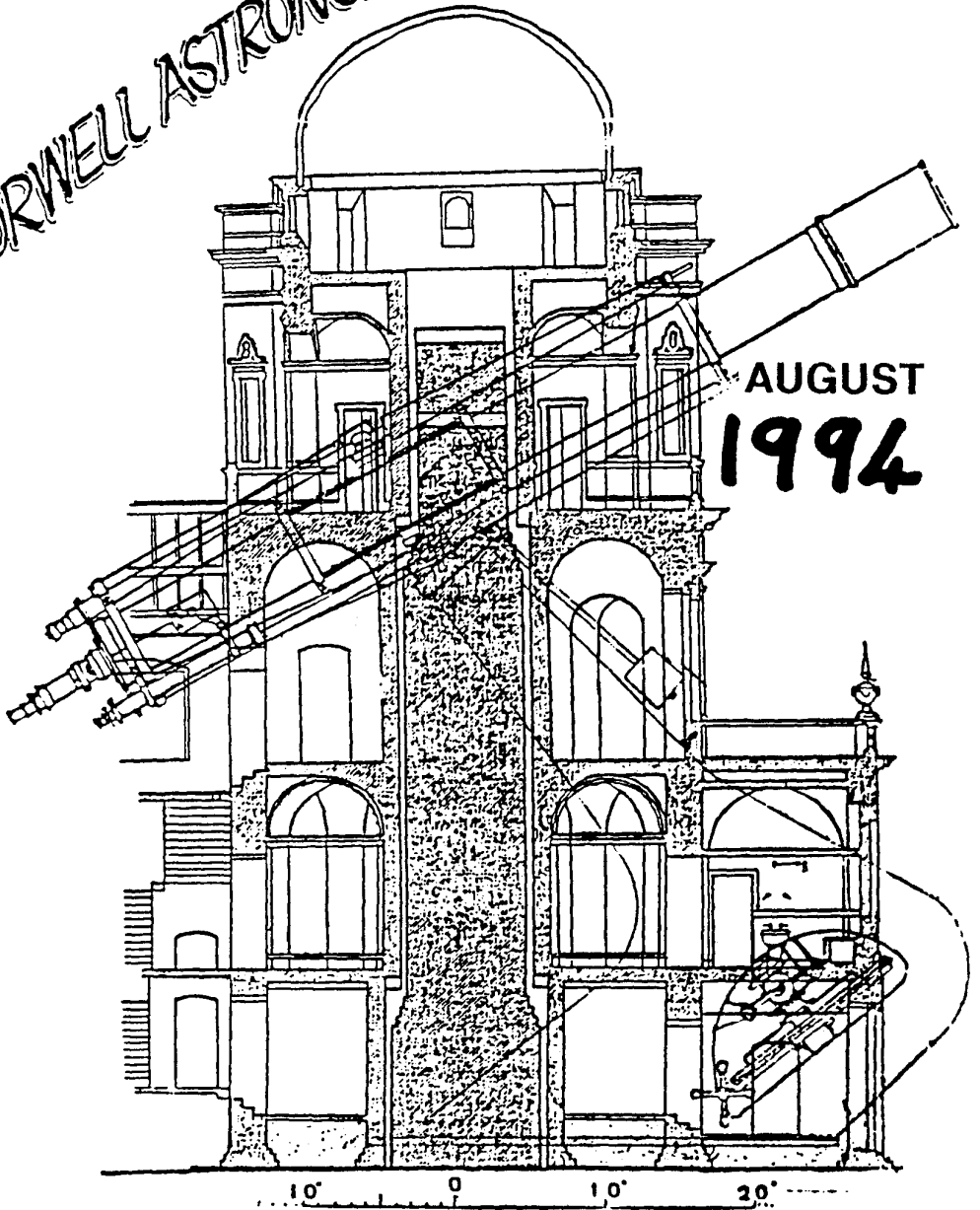


ORWELL ASTRONOMICAL SOCIETY IPSWICH



AUGUST  
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) FAS Convention Cambridge 24-9-94
- ii) The annual Open Weekend will be held in the autumn.
- iii) Bury Star Party? We have been asked to help organise a star party as part of the Bury St Edmunds Time & Motion Festival. No information available  
Probable date Saturday 10-12-94
- iv) 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	
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 04.19 to 05.07  
Sets approximately at 19.51 to 18.52

# MOON



7th



14th



21st



29th

MERCURY Mercury will be at superior conjunction on 13th. When it returns to the evening sky it will be too close to the sun for observation.

VENUS Venus will be at greatest eastern elongation on the 24th (46°). Mag. -4.4

MARS Mars will be rising at midnight towards the end of the month. Mag. 1.2.

JUPITER Jupiter will be setting at about 22.00 in mid month. Mag. -1.9

SATURN Saturn will be rising a few minutes after sunset in mid month. Mag. 0.5

URANUS & Neptune Both planets are in Sagittarius, and will be visible all night. They will be setting at about 02.00 in mid month.

*R. Gooding*

## Two Lovely Black Eyes

On Wednesday 20th July after finishing work I went to the observatory at about 10pm. The sky was clear so it was a good opportunity to use the telescope and find out how Jupiter was reacting to the impacts of Comet Shoemaker-Levy. When I got there it was very busy as a lot of people had taken advantage of the clear sky. My turn soon came round and I was able to see two dark impact marks, one left of centre at the top and another entering from the right. Both were larger than the Big Red Spot although I couldn't see it at the time. The second one was as far as we could tell, due to the last impact that occurred at about 9.0pm. So the after effects of the explosion must have caused the dark areas to grow at a terrific rate. This left Jupiter looking as if it had two black eyes.

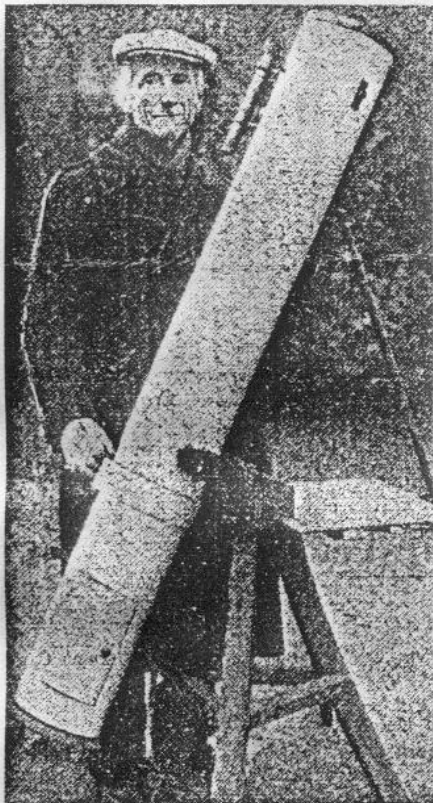
If any body else has any reports of sightings or any thing of interest to report about the Jupiter Shoemaker-Levy encounter or any thing else they think might be of interest to other members please send them to me with drawings or pictures that I can include in journals at a later date.

E. Sims.

# TRIMLEY'S MOON MAN

Author of article has requested anonymity online

Forty years ago a local amateur became one of the elite group of distinguished astronomers who have a lunar crater named after them. Roland L. T. Clarkson of the Bungalow, The Avenue, Trimley, received this honour from one of the leading mappers of the Moon, H P Wilkins. The East Anglian Daily Times and the Ipswich Evening Star of February 18th 1954 carried articles on Clarkson and his crater.



Clarkson in the Ipswich Evening Star in 1954

developed over 29 years of lunar study. His dedication and the quality of his work earned him great respect amongst his contemporaries.

Clarkson (who was 65 in 1954) had become interested in astronomy as a schoolboy. He kept notebooks and sketches from 1906, when he began his observation work in earnest,

Today we think of the Moon as being on our celestial doorstep: its twenty five years since Neil Armstrong set foot on the Moon's surface and the space probe Clementine has just finished mapping the Moon in great detail. Yet when Clarkson was observing, just fifteen years before Armstrong's 'giant leap for mankind', the Moon appeared as beyond our physical reach as it ever had been. Its study was primarily the domain of the amateur - often working with very modest equipment. The British Astronomical Association (BAA) Lunar section under the guidance of its

director - H P Wilkins - took a leading role in mapping the lunar surface. Clarkson had a particular interest in the Moon and was a prolific contributor to the Lunar Section's work. His skill at sketching the surface details at the eyepiece of his 6<sup>1</sup>/<sub>2</sub> inch reflector were

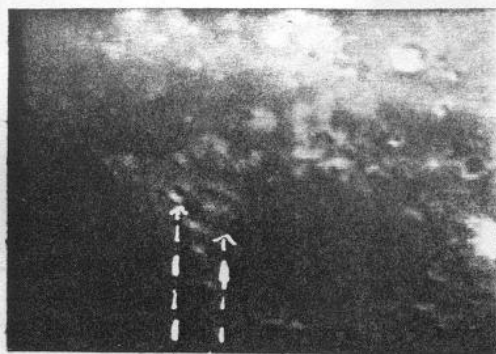
and then on for almost 50 years. The BAA still have many of his observations in their archives.

Clarkson was a founder and president of the Ipswich and District Astronomical Society (IDAS). The IDAS was an indirect ancestor of the Orwell Astronomical Society Ipswich (OASI), being the local astronomical society in the early 1950's and regularly meeting at the Orwell Park Observatory. Some of the IDAS members were founder members of the OASI in 1967.

In subsequent re-mapping of the Moon, the International Astronomical Union has removed names of some of the contributors to lunar Astronomy who were less well-known - internationally; unfortunately Clarkson was amongst them. Clarkson's crater has reverted to its original name: Gassendi A. The crater is easily observable being over 20 miles in diameter and ringed by 13,000 foot peaks. The inset picture below shows Gassendi A and was taken using a CCD camera by OASI member Mike Harlow (who lives close to where Clarkson lived, in Trimley).

Experienced OASI observers are finding their interest in the Moon revitalised by the use of electronic imaging using Charge-Coupled Devices (CCDs). Exciting as this technological revolution in amateur astronomy is, it is important to remember that the techniques that Clarkson used, a pencil and paper and the observers eye, are still excellent tools for lunar observation. Seeing the Moon directly gives a real sense of exploring another world.

However you observe, take the opportunity to explore the lunar landscape and, when you do, have a look at crater Clarkson (sorry, I mean Gassendi A).



Gassendi  
Gassendi A



CCD image of Gassendi, with Gassendi A and surrounding area taken, from Trimley, by Mike Harlow.

## ***AFTER-WORDS on Trimley's Moon Man:***

*Clementine*, at the time of writing, has just completed its successful lunar mapping mission. However, a fault has resulted in a large proportion of its fuel being jettisoned into space. As a consequence *Clementine* will be unable to continue its intended mission to flyby the asteroid Geographos. Despite this incident the mission has been highly successful with 1.5 million images made of the lunar surface including many which show the surface shape (topology) in high resolution. Observations made by *Clementine* appear to indicate the presence of ice in areas of the Moon which are permanently in the shade. The ice, if it exists, may have been brought in by meteorites.

*Gassendi* is well known to regular lunar observers. It is 55 miles in diameter with high walls and a prominent central peak. The presence of a central peak is evidence that a crater has been formed by the impact by a meteorite and in fact most if not all the lunar craters are thought to be impact craters. A meteorite travelling at high speed will explode on hitting the surface of the Moon - the peak is due to the shock-wave rebounding and forcing the surface upwards. The walls are formed by the curtain of material blasted out from the lunar surface by the force of the exploding meteorite falls back down to form a ring around the centre of the impact.

Part of the North wall of *Gassendi* has been demolished by a subsequent impact which formed *Gassendi A*: which as Patrick Moore's 'Guide to the Moon' says, "named Clarkson on some former maps".

*TLPs* - *Gassendi* is famous for the widely observed TLP seen on 30th April 1966. TLPs (Transient Lunar Phenomena) are strange features - mainly colourations or glows - which are seen from time to time on the otherwise unchanging lunar surface, most often appearing in crater floors. TLPs are somewhat controversial things and many observers discount them as optical illusions while others claim they are manifestations of real events - such as the seeping of gasses from beneath the surface. The *Gassendi* TLP (again, quoting Patrick Moore's 'Guide to the Moon') "was a wedge shaped orange-red streak extending from the wall of *Gassendi* right across to the central peak".

**Lunar Drawing** - If you want to try drawing lunar surface details here are some brief notes:

1. When you initially look through the eyepiece at your intended subject and it looks quite complex - don't worry! Proper recording of your observations don't require the level of realism of a Constable or Gainsborough painting. The object is to record the general appearance of the subject, location of shadows etc.
2. Make a line drawing showing the general outline of objects such as crater walls, mountain ridges, edges of shadows, and so on. These are the contours between light and dark areas: A 'B' pencil is recommended for this.
3. Next fill in the darkest areas with a very soft pencil (i.e. 4B or 5B).
4. The intermediate brightness areas can be filled in using a B pencil.
5. The lightest areas are, of course, left white, but slightly less bright areas can be shaded using an HB or F pencil.
6. (Optional) Send a copy of your drawing to a committee member for display/publication.

More advanced techniques you might wish to apply include the finishing of sketches using India ink (diluted with water to get the various shades between black and white) and the use of Schroter's system of grading the brightness of areas from 0 to 10 and producing a labelled contour map of brightness.

**CCDs** - although more usually associated with the observation of faint galaxies and nebula, they can be used to obtain images of the lunar surface which would be difficult to capture by other means. The fluctuating seeing conditions caused by turbulence in the Earth's atmosphere mean that you take are lucky if you manage to take a photograph at the right moment, whereas you can continually gather CCD images saving on computer those which have been made when the seeing, fleetingly, steadies.

**Acknowledgement:** Thanks are due: firstly to Dr Richard McKim - Director of the Mars Section of the British Astronomical Association - for bringing Clarkson's story to my attention; and secondly to the East Anglian Daily Times Company for supplying the photo of Roland L T Clarkson and giving permission to reproduce it.

# PROGRAMME FOR AUGUST

DAYS & DATES	DIRECTORS	SECTION & ADDRESSES	PHONE INC. STD CODE
Mondays	from 7.30pm	GENERAL OBSERVATION SECTION	
1-8-15-22-29	Mr J King	[REDACTED], Felixstowe, IP11 9LQ	[REDACTED]
Tuesdays	form 7.30pm	GENERAL OBSERVATION SECTION	
2-9-16-23 30	Mr D Barnard Mr J King	[REDACTED] IP3 8RN (Address above.)	(Number above)
Wednesdays	from 8.00pm	NEBULA & FAINT OBJECTS SECTION	
3-10-17-24 31	Mr M Cook Mr D Payne	[REDACTED], Ipswich, IP4 5PZ [REDACTED], Wickham Market, IP13 OSD	[REDACTED]
Thursdays	from 7.30pm	OBSERVATORY VISITS FROM OUTSIDE GROUPS	
4-11-18-25	Mr P Richards	[REDACTED], Nacton, Ipswich, IP10 0HS	[REDACTED]
Fridays	from 7.30pm (may be postponed to Saturday)	PLANETARY & LUNAR SECTION	
5-12-19-26	Mr P Richards  Mr G Marriott	(Address above.)  [REDACTED] Ipswich IP4 4JB	(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:

## 1994 COMMITTEE

CHAIRMAN	D Payne (Address above)	Home Phone:	Work Phone:
MEMBERSHIP RENEWALS	M. Cook (Address above)	[REDACTED]	
MEMBERSHIP SECRETARY	R. Gooding		
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	M. Harlow [REDACTED] Trimley [REDACTED]		
SPECIAL EVENTS CO-ORD	P. Richards		
LIBRARIAN & COMP SOFTWARE	J. Appleton [REDACTED] Ipswich IP3 0QJ		