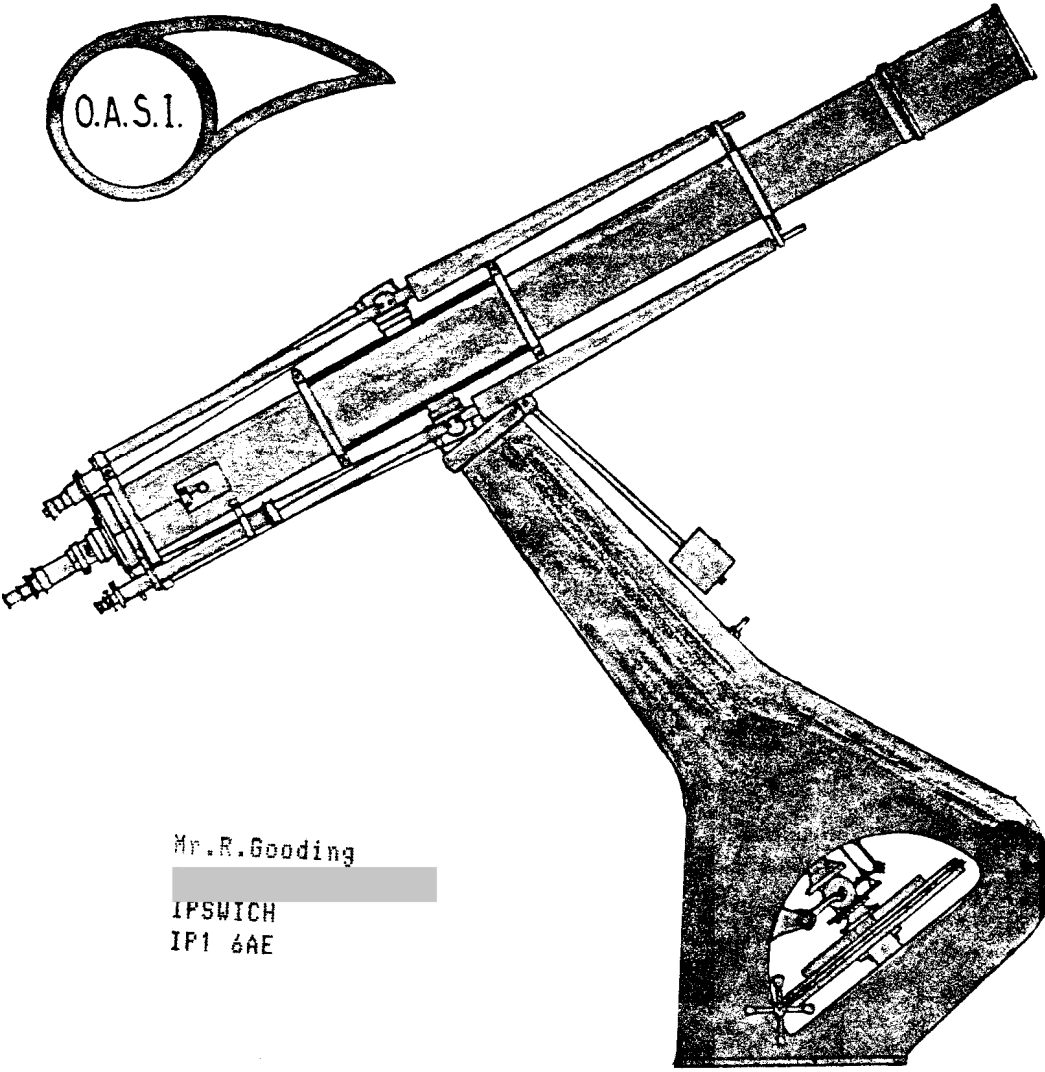
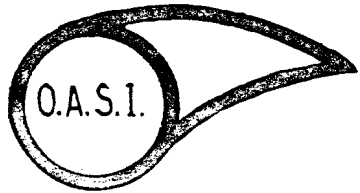


# ORWELL ASTRONOMICAL SOCIETY (IPSWICH)

MARCH 1983



Mr. R. Gooding

IPSWICH  
IP1 6AE

The Orwell Park Observatory 10-inch Astronomical Telescope at Nacton near Ipswich

# SOCIETY NEWS

**FORTHCOMING ATTRACTIONS** At the Committee Meeting held on 5th February it was decided to hold another 'Open Weekend'. This will be on Friday 22nd, Saturday 23rd, Sunday 24th and Monday 25th April 'for viewing the Stars' at the Observatory as we did last year. The Observatory will be open on these four nights from 8 p.m. to 11 p.m. for visitors to look through the big telescope (- hopefully for a small donation toward Society funds).

As many members as possible are asked to help on one of these nights (or more if possible) even if it is only for a couple of hours. If you can help out please contact Eric Sims, [redacted], Ipswich, 'phone [redacted], or any Committee member.

A selection of small telescopes is also required for use on the balconies. These will also need manning.

**MEMBERSHIP SUBSCRIPTIONS** All membership renewal subscriptions to our Society became due on 1st January 1983. If you have not renewed your membership of our Society and would like to do so, please send your cheque made out to 'Orwell Astronomical Society (Ipswich)', to Mr. M. Barriskill, Membership Secretary, O. A. S. I., [redacted], Ipswich, or see he gets your sub. by some similar means of payment.

Membership subscriptions are at the following rates:

Family Membership	£5.50
Adult -	£4.50
Junior -	£3.00

The monthly Journal will be posted to members at an additional cost of £1.50 for the year, otherwise your Journal can be collected from the Clubroom at the Observatory.

Unfortunately, we have to stipulate that this March Newsletter will be the last sent to members who have not renewed their subscriptions.

## NEW MEMBERS

(Joined in December and January:)

Mr. D. Arnold, [redacted], Ipswich, IP10 0AA  
Mr. Chaplin, [redacted], Needham Market, Ipswich, IP6 8DQ  
Mr. R. Newman, [redacted], Felixstowe, Suffolk, IP11 9DY  
Mr. A. Thurlow, [redacted], Ipswich, IP1 6DB

(Joined in February:)

Mr. N. Wright, [redacted], Bucklesham, Ipswich, IP10 0DY



# THE NIGHT SKY

in MARCH

Gemini and Cancer are well disposed earlier in the evening around 8 p.m. near the South meridian, with Leo and Leo Minor 'centred' two hours later. At midnight, the large region of clusters and nebulae stretching up from Virgo through Coma, Canes Venatici and into Ursa Major is in the best place for viewing.

So well endowed is this region that one could possibly use a wide-view transit instrument and be busy for at least two hours if one got one's 'programme' right. A transit telescope would be somewhat limiting of course, as it would be nice to dwell longer on so many of the sights, but certainly with this segment of the sky there is a great deal to be seen.

Arcturus in Bootes is well up by this time (midnight), followed by Corona Borealis. Spica appears, nearer the horizon, outstanding in Virgo, and for those up very early in, or staying up till, the advanced early hours, cleared-away skies may just reveal the reddish Antares in Scorpio hovering just above the horizon to the South.

**THE SUN** Up at 06h 48m on the first day, getting increasingly earlier - 05h 40m at the end of the month. The Sun's 'bedtime' changes from 17h 38m at first, to 18h 30m at month-end.

<b>THE MOON</b>	<b>Phases</b>	Last Quarter	06d 13h 16m	First Quarter	22d 02h 25m
		New Moon	14d 17h 43m	Full Moon	28d 19h 27m
	<b>Occultations</b>	Star	Phase	Mag.	Time
		577	D	6.0	19d 20h 24.0m
D = Disappearance		1050	D	5.8	22d 20h 53.3m

Stars listed according to Zodiacal Catalog (ZC) numbers.

SEE ALSO JUPITER BELOW:  
Times listed are those for the latitude and longitude of Greenwich.

## THE PLANETS

MERCURY is in superior conjunction on the 26th and is not favourably placed for observation.

VENUS, however, is 'impossible' to miss for many hours after sunset, at mag. -3.4, 12".

MARS is disappearing faster each night into the twilight - for normal observation it will be inaccessible for several months after this. Diameter 4"arc.

JUPITER Can be seen in the morning sky at mag. -1.8. At 03h approx. on the 6th, Jupiter is in conjunction with the Moon, and it appears there may be an occultation of Jupiter by the Moon's southern limb, though it is also seen stated that at that time, Jupiter is 10.0 South. Further information than is immediately to hand on writing this, is required to ascertain which information is in error as the Moon is only the order of 0.5° wide, and of course, Jupiter running now at only 36"arc diameter, at the equator.

SATURN is basically a morning object at first, but will be seeable in the late evening before the end of the month, magnitude +0.5. Twice Saturn passes the Moon with only about 1.5° to spare - on 3rd (06h) and 30th (14h). Diam. 16"arc(equ.)

URANUS & NEPTUNE are both very low in the southern region of the sky, both at about -22° Declination, but are technically visible, respectively from 03h30m and 05h at month-start, to 01h30m and 03h at month-end for a 10° altitude for each planet.

Respective diameters are 4" and 2" arc.

Source: Whitaker's Almanack 1983. All times U. T. Roy Adams.

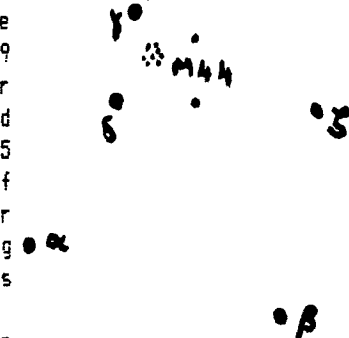
(I can not say when B. S. T. begins: I have one source saying 20th March, and two saying 27th.)

The two clusters described this month are both visible with the naked eye on clear dark nights. The first is M44 known as the "Praesepe" or "Beehive". The other is M48 in Hydra, this cluster is in rather a barren part of the sky and can be easily overlooked.

The "Beehive" or M44 is in Cancer the Crab ( see map ). It is clearly visible with the naked eye as a misty patch forming a triangle with the stars Gamma and Delta Cancrī. On the best nights there is a hint of resolution into stars. It is a large object over 1 degree in diameter. Because of the large size a good instrument for observing it with, is a pair of binoculars. These will clearly show the brighter members of the cluster as well as many of the fainter stars. For telescopic viewing low power and wide field eyepieces are necessary if the cluster is to be viewed in its entirety. The cluster contains about 200 true members in the magnitude range 6.3 to 14. The sun would be a 10.9 magnitude star if placed in this cluster and there are about 100 stars that would be brighter. It is estimated to be 525 light years distant, with a diameter of around 13 light years for the brighter central portion. When the faint outlying members are included the diameter is increased to 40 light years.

The cluster M48 in Hydra is rather inconspicuous compared with the "Beehive" cluster in Cancer. It is best found with binoculars as only on the clearest nights is it visible with the unaided eye. The cluster contains about 50 stars from magnitude 8.8 to about magnitude 13. It is just resolvable into stars with 10x50 binoculars while a three inch telescope will show chains of 10th and 11th magnitude stars. Although not as large as M44 it is over half a degree in diameter and therefore needs low to moderate powers when observing the whole cluster. It is estimated to be about 1600 light years away with a diameter around 20 light years.

CANCER



HYDRA



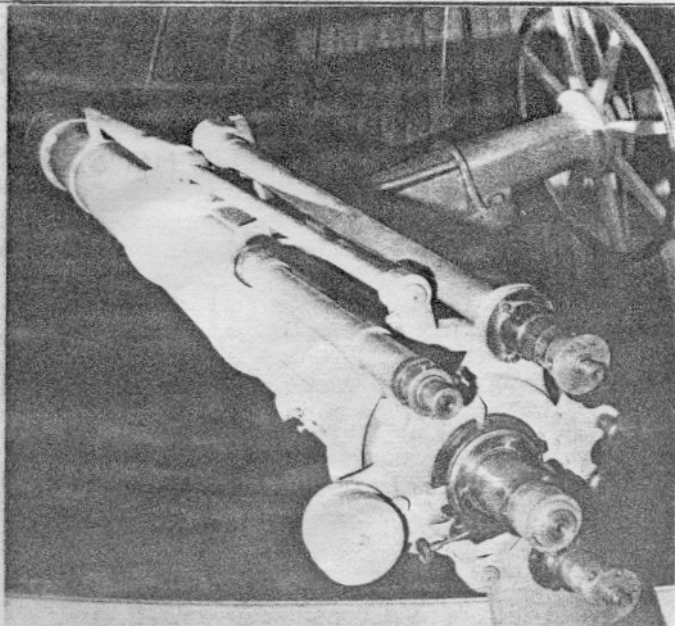
In the last issue of the Journal, we covered observations made of Comet 1982f at the time it was changing direction strongly in the sky, and this reminded me that I had in my files, some drawings of a comet that had at the time been much more readily visible and had in fact 'made' at least one National weekly and one large-city evening newspaper in the hope that it would turn out to be even more spectacular. I hasten to add that it was not my drawings which 'made' the publications concerned - just news heralding the comet - Comet Arend-Roland. I mention the newspapers, because they were very much instrumental in arousing interest in looking for the comet.

It was possibly because of the papers that some of my 'youth club' friends - some at the time appearing never to be likely to have the slightest interest in astronomy - were actually interested in looking for it. I think it would have required more than my own saying 'it was up there somewhere', and that I wanted to see it. I don't know. Maybe they wanted to beat me to it. What I do know is that we were all two more valuable miles into 'darker skies' than where we lived, that I had spent most of the evening on another pursuit - dancing - whilst they had left the dance-hall earlier for even darker skies, and one of them rushed in to me all excited and said, 'I think I've seen it'.

He had, indeed, as I was able to tell them on walking away from the lights to where he had just been. The dance (now at an 'advanced' stage anyway) was forgotten and a troop of five elated persons made tracks for my back garden, unfortunately somewhat light-polluted but not so badly as nowadays, and resorted to the small leatherbound terrestrial refractor that was then my only instrument. After the due coffees (home-made, not the then all-the-rage frothy Gaggia ones) I drew the first position of the comet and sky background for future comet positions. I have told the 'story behind it' here because it shows that interest can be aroused in astronomy even where one may think it would not be, and because I may not have found the comet had it not been for these friends in the first place.

Incidentally, there have been further observations of 1982f but no scripts sent in about them to date by other members. (Comet Arend-Roland drawings are overleaf.)

Photograph by David Payne



A PICTURE OF THE ORWELL PARK TEN-INCH EQUATORIAL REFRACTOR AT THE OBSERVATORY

included to show an actual picture of the telescope to those who may not have been able to get up the Dome for some time, or at all.

PLEASE REMEMBER that all members are free to use the telescope on programme observing nights and on any other night if attendance of Directors is arranged.

COMET AREND-ROLAND (1957)

$\epsilon$  2 Lyncis

↑ to Polaris

$\alpha$  Camelopardi

$\delta$  Aurigae

$\beta$  Camelopardi

Field Identification Drawing

← MAY 4 2300<sup>h</sup> GMT

OBSERVER:  
Roy Adams.  
LOCATION:  
1.5 miles NW of Birmingham City centre.  
INSTRUMENT:  
20x40mm terrestrial refractor, (unmounted).  
SEEING:  
Reasonable except on May 7th (1957).  
NOTE:  
A handy fence was used to steady the telescope.

$\alpha$  Aurigae (Capella)

↑ to Polaris

$\eta$   $\epsilon$   $\delta$

$\Sigma 618$  : MAY 7 0100<sup>h</sup> GMT (bad visibility)

$\circ \Sigma 88$  MAY 5 2300<sup>h</sup> GMT

$\beta$  Camelopardi

$\circ 10$

← MAY 4 2300<sup>h</sup> GMT

$\circ 12$

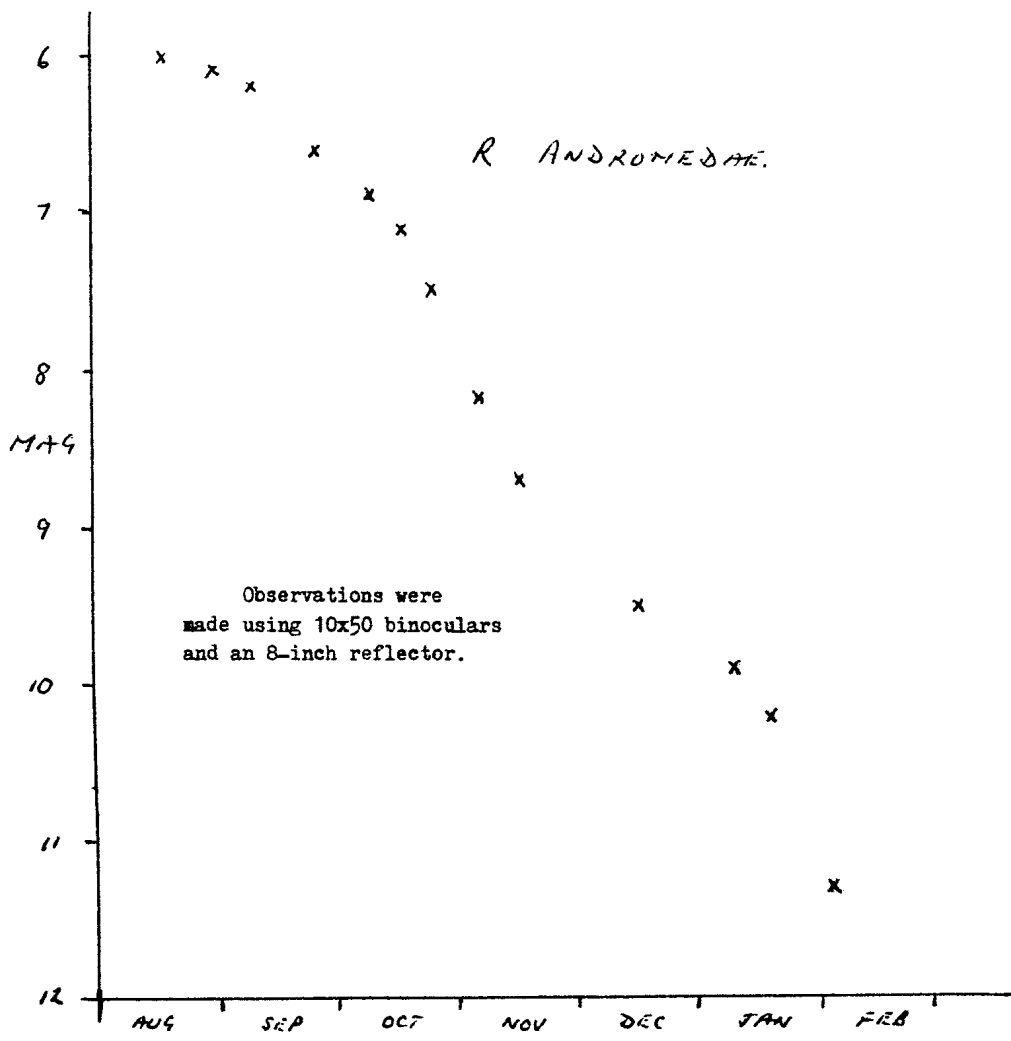
ACA



The light curve shown this month is that of R Andromedae from August last year to early February this year. As can be seen, this star has quite a large magnitude range, typical of the class of long period variables to which it belongs. In fact, at maximum, it can get as bright as the 5th magnitude, and at minimum, as faint as the 15th.

The period is quoted as being 409 days on average, varying by a few days. The fall to minimum is normally slower than the rise to maximum, but this is difficult to tell from the portion of light curve shown.

Like most of the class it is an old red giant star and the redness can be clearly seen at maximum. For a considerable part of the time either side of maximum, this star can be observed with binoculars. At some maxima it can be observed with the naked eye. It is quite easily located should anyone want to observe it.



PROGRAMME FOR MARCH, 1983

at the Observatory, Orwell Park School, Nacton, Ipswich.

**TUESDAYS** from 8 p.m. General Observation Section  
 1, 8, 15, 22, 29  
 Mr. N. Gage, [redacted], Felixstowe. Tel: Fel. [redacted]  
 Mr. R. Hebbs, [redacted], Felixstowe, Tel: Fel. [redacted]

**WEDNESDAYS** from 8 p.m. Nebulae and Faint Objects Section  
 2, 9, 16, 23, 30  
 Mr. M. Cook, [redacted], Ipswich. Tel: Ips. [redacted]  
 Mr. D. Payne, [redacted], Wickham Market. Tel: [redacted]

**FRIDAYS** from 8 p.m. Variable Stars Section  
 4, 18  
 Mr. R. Gooding, [redacted], Ipswich.  
 Mr. M. Nicholls, [redacted], Capel St. Mary. Tel: Ips. [redacted]

**SUNDAYS** from 8 p.m. General Observation Section  
 6, 20  
 Mr. M. Barriskill, [redacted], Ipswich.  
 Mr. R. Adams, [redacted], Ipswich. Tel: Ips. [redacted]

**COMMITTEE MEETING:** Sat. 12th March in Clubroom at 7.30. All members invited.

SPECIAL EVENTS

Friday 25th March, 8 p.m. **LECTURE ON COMETS** by MR. M. HENDRIE, Director of the Comet Section of the British Astronomical Association. Everybody is invited.

COMMITTEE

Chairman	D. Payne	[redacted], Wickham Market, IP13 OSD	Work: [redacted] Home: [redacted]
Vice Chairman	R. Cheesman	[redacted], Patchinghall Lane, Chelmsford, CM1 4DF	Work: [redacted]
Secretary	R. Gooding	[redacted], Ipswich	Work: [redacted]
Treasurer	M. Nicholls	[redacted], Capel St. Mary, Ipswich, IP9 2EX	Work: [redacted] Home: [redacted]
Membership Sec:	M. Barriskill	[redacted], Ipswich.	Work: [redacted]
P. R. O.	D. Barnard	[redacted], Ipswich, IP4 5PP	Work: [redacted] Home: [redacted]
Maintenance	M. Cook	[redacted], Ipswich, IP4 5QA	Work: [redacted] Home: [redacted]
Functions	E. Sims	[redacted], Ipswich, IP1 4HA	Home: [redacted]
Librarian	N. Gage	[redacted], Felixstowe, IP11 8ED	Home: [redacted]