

# ORWELL ASTRONOMICAL

## SOCIETY IPSWICH

Charity No 271313

### MARCH 1999



## Society News

### 1 Membership subscription for 1999

Subscriptions for 1999 will be due from 1st of January, for members who have not already paid. The rates for this year are: -

Junior & OAP	£9.00
Adult	£13.00
Family	£15.00

A renewal form is included with the January newsletter. It would be appreciated if you could return this so that the society membership records can kept up to date. This will be the last newsletter you receive if you have yet paid your subscriptions for 1999.

Please make cheques & P.O.'s payable to the: -

**ORWELL ASTRONOMICAL SOCIETY (IPSWICH)**

Please return all subscriptions to

Martin Cook

Ipswich  
IP4 5PZ

### Events for 1999

Event	Details	Date
Visit to Norwich AS's observatory	To be arranged	
Lecture Meeting	Members short talks	5 <sup>th</sup> March
Oxford Astronomy Weekend	Cost £132	April date?
BAA Winchester Weekend		1 <sup>st</sup> April
Lecture Meeting	Frank Flynn Getting the measure of the Universe	23 <sup>rd</sup> April
Summer Excursion	To be arranged	
Summer Barbecue	To be arranged	
BAA Exhibition Meeting	London Guildhall University Calcutta House	26 <sup>th</sup> June
Eclipse	Members to make own arrangements	11 <sup>th</sup> August
Astro Camp		
FAS meeting Cambridge		2 <sup>nd</sup> October
Open Weekend	To be arranged	Mid October
Christmas Meal	To be arranged	10 <sup>th</sup> December

Other events will be added to this list throughout the year

## Sun

The sun will be rising at approximately between 06:50 to 05:40

The sun will be setting approximately between 17:30 to 18:20

## Moon

Full Moon	3 <sup>rd</sup> Quarter	New Moon	1 <sup>st</sup> Quarter	Full Moon
2 <sup>nd</sup>	10 <sup>th</sup>	17 <sup>th</sup>	24 <sup>th</sup>	31 <sup>st</sup>

**Mercury** Mercury reaches greatest eastern elongation on the 3<sup>rd</sup>, when it will be at 18°. By the 19<sup>th</sup> Mercury will be at inferior conjunction, after which it will move back in to the morning sky. It will be too close to the sun to see during the rest of the month.

**Venus** Venus remains very prominent in the evening sky. It will be setting at about 22:00 at the end of the month. Magnitude -3.9

**Mars** Mars will be rising by 21:00 at the end of the month. Magnitude 0.5

**Jupiter** Jupiter will be lost in the evening twilight this month.

**Saturn** Saturn will be setting by about 2 hours after the sun this month. Magnitude 0.7

**Uranus** Uranus will be rising in the early morning sky, at about 05:00 in mid month. Magnitude 5.7

**Neptune** Neptune will be rising about 40 minutes before Uranus in mid month. Magnitude 7.8

## Meteor Showers

There are no showers of month any note this

Meteor source is the BAA Handbook

Roy Gooding

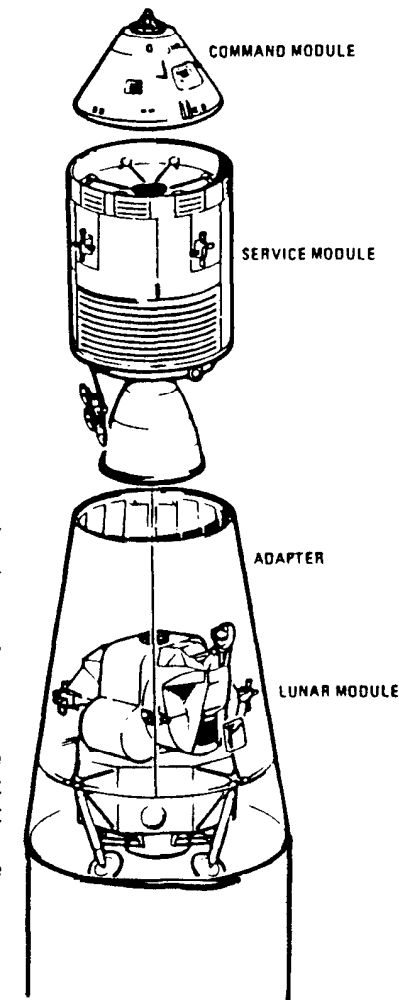
## ONE SMALL STEP - THIRTY YEARS ON

NASA's next step towards reaching the moon was taken on 3<sup>rd</sup> March, 1969, when **Apollo 9** blasted off from Cape Canaveral with Astronauts James McDivitt, Dave Scott and 'Rusty' Schweickart on board. Their mission goal was to test the integrity of the whole Apollo system and, for the first time, fly the Lunar Excursion Module with a crew on board and practice separation, rendezvous & docking procedures. Their journey would involve a ten day flight and 151 earth orbits over a distance of some 4,350,000 miles.

When orbital height had been achieved the Command Module pilot, Dave Scott, began a critical manoeuvre by separating the Capsule/Command & Service Module from the last stage of the Saturn Rocket and turning it around to extract the LEM from its adapter & casing at the top of the final stage. This essential manoeuvre was known as transposition & docking. After which, the final stage of the Saturn Rocket fired its engine and was sent away from earth into an eternal solar orbit.

The following 24 hours were spent checking out systems on the docked spaceships and rest time for the crew. Schweickart had been designated as Lunar Module Pilot (A somewhat loose term as the mission commanders actually flew the LEMs whilst the 'pilot' who, by NASA convention, was always the least experienced Astronaut and acted as a systems engineer). It was his task to test the integrity of the space suits that Astronauts would wear on the surface of the moon by an extra vehicular activity (EVA - Spacewalk), climbing outside the LEM and standing on the steps plus retrieving various experimental samples from the side of the craft. However, this part of the mission was delayed four days as Schweickart was suffering from spacesickness.

On day five the most critical part of the mission began when McDivitt & Schweickart entered the LEM and separated their craft from the CM/SM. At this point the LEM (known by the nickname 'Spider') became mankind's first true spaceship by virtue of its having been built entirely for space use and



## IN WITH A NEW BROOM

At our recent AGM I had a bit of a moan about the rather unwelcoming austere look and feel of the clubroom. In my extremely humble opinion it does little to inspire visitors or prospective members and shows little of our activities or history. In having this moan I mean no insult to those who have so tirelessly worked to restore the premises over many years and who have, at least, brought the place back to life after years of neglect. However, time moves on and, as our Chairman rightly replied to me, "If you want something done - GO OUT AND DO IT!" Thus it would appear that I seem to have elected myself as some sort of unofficial 'Clubroom Monitor/Janitor/Oily Rag' with a view to revamping the notice boards - creating fresh displays and keeping the place tidy. What I have in mind entirely excludes beads in the doorways, fluffy pink cushions or velvet drapes - more bringing the display boards kicking and screaming towards the 21st century to reflect a true picture of who we are and where we are going with OASI. Some displays in mind include:

RESTORATION OF THE OBSERVATORY - BEFORE & AFTER  
HISTORY OF THE OBSERVATORY  
MEMBERS HOME TELESCOPES & OBSERVATORIES  
MEMBERS ASTRO PHOTOGRAPHS, CCD IMAGES & DRAWINGS  
PHOTOGRAPHS OF SOCIETY OUTINGS AND OTHER SOCIAL OCCASIONS  
ASTRONOMICAL & SPACE FLIGHT POSTERS  
FORTHCOMING ASTRONOMICAL PHENOMENA & EVENTS  
MEMBERS NOTICE BOARD

I have one or two other displays in mind which should really be considered by our committee first.

### NOW AN APPEAL FOR YOUR HELP.

Have you any photographs showing the observatory before or during its restoration or any other information - written or pictorial - of its history?

Can you please supply a photograph of your home observatory, instruments and yourself standing by same. We haven't all got Mount Palomar in our gardens - you may just observe with binoculars or naked eye. How about sending in a picture anyway? Our wonderful hobby can be enjoyed at all levels and experience - this is absolutely the human face of OASI I'd like to communicate to others. A few short lines on when and where you observe or about your equipment would 'ice the cake' as it were.

Can you supply your own astronomical photographs, CCD images or drawings etc for display? What ideas have you got to improve the clubroom?

One cannot but notice the warm and friendly atmosphere pervading the Interactive Sessions - or the fact that so few participants seem to come up to the clubroom and, obviously, the main observatory afterwards. Perhaps the very starkness of the room is one of the reasons that happy atmosphere downstairs fails to transplant itself upstairs? It has been a discussion point for many weeks now amongst members who DO frequent and enjoy the clubroom. We could certainly work a little towards breaking down these artificial barriers by making the clubroom somewhere welcoming, interesting and where you'll want to visit.

Please bend my ear on a Wednesday evening or write to me:

**Ken Goward, [REDACTED], Mistley, Manningtree, CO11 1LH.**

having no terrestrial integrity. After an initial period flying around the CM (now called 'Gumdrop') McDivitt fired Spider's descent engine and drew the craft 13 miles above Gumdrop - after 2 hours the distance was increased to 50 miles. This was followed by a drifting back towards each other before McDivitt fired the engine again to simulate an actual lunar descent. At a distance of 100 miles the descent stage of Spider was separated & jettisoned by explosive bolts and McDivitt fired the ascent stage engine to bring the two craft back to dock. NASA had planned for the LM pilot to handle the redocking of the two craft but, after experiencing great difficulty stabilising the ascent stage, it was decided that all future dockings would be undertaken by the CM pilot who had the advantage of a heavier and consequently more stable craft.

When the crew had transferred back into the CM, Spider was jettisoned to burn up in earth's atmosphere as its bottom half had done earlier. The next few days were spent performing various experiments including the use of a revolutionary 'Earth Resources' camera - environmental matters were only just beginning to come to the fore in those days. Splashdown was delayed by one orbit due to high seas in the Pacific and the mission's alternative splashdown point was used in the Atlantic, USS Guadalcanal 535 miles south of Bermuda.

The two Apollo craft had performed almost faultlessly and just one more test mission in lunar orbit stood before the first landing by the crew of Apollo 11.

*Ken Goward*

## OCCULTATIONS DURING MARCH 1999

The table lists stellar occultation disappearance events which occur during the month under favourable circumstances. The data relates to Orwell Park Observatory, but will be similar at nearby locations.

Note in particular the occultation of the first magnitude star Aldebaran (the *Eye of the Bull*) in the early evening of Monday 22<sup>nd</sup> March.

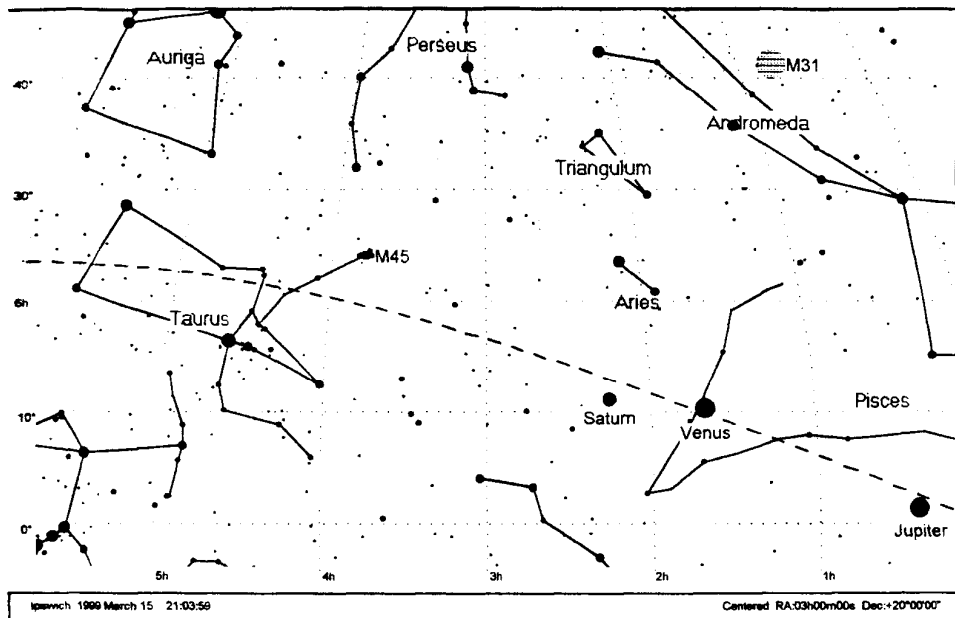
D or R	Date & Time (UT)	Lunar Phase	Sun Alt (d)	Star Alt (d)	Min Dist (rad)	Star	Mag
D	21 Mar 20:06	.21+	-18	25	.87N	ZC 526	6.7
D	22 Mar 18:29	.31+	-4	48	.09S	Aldebaran	0.9
R	19:38		-14	39			
D	23 Mar 23:18	.44+	-36	17	.84N	ZC 871	6.7
D	25 Mar 00:05	.56+	-36	19	.29S	ZC 1038	7.1
D	27 Mar 19:57	.84+	-15	50	.10N	ZC 1396	6.8
D	28 Mar 03:02	.86+	-23	12	.24N	ZC 1425	7.0
D	30 Mar 04:12	.97+	-13	10	.79N	sigma Leo	4.1

James Appleton

## Informal Interactive Workshops

Five workshops have taken place in the proposed initial series of seven, each with twenty or so members attending from across the strata of the society. It has been very **helpful** to have so many of our experienced members there to join in the discussions, **and** to share their knowledge with those new to Astronomy. We have had an age range from six to eightytwo, which is an interesting challenge for the planners and presenters. The two remaining workshops on March 10th and April 14th are on topics which may look more technical and advanced ie: CCD imaging, and Astrophotography. But they are only an introduction to the subjects, which I for one know nothing about! The two presenters are our own members as usual, Mike Harlow and Neil Morley, both of whom have attended some of the workshops, and know that they are run with the beginner in mind. Another of our members, Nigel Evans, who attended the most recent workshop on eclipses, has offered to do an extra session on eclipse photography, a subject in which he is well qualified. His eclipse photographs have been used in the astronomy magazines, and in a recent publication on the subject by Patrick Moore. Confirmation of date has yet to be made: but May 12th is a possibility. Watch our society journal for more on this, and many thanks to all those who have attended the workshops and helped to make them worthwhile.

Ted Sampson.



## PROGRAMME FOR MARCH

<i>Mondays from 7.30pm</i> Mr N Gage	GENERAL OBSERVATION SECTION
<i>Tuesdays from 7.30pm</i> Mr P Richards	OBSERVATORY VISITS FROM OUTSIDE GROUPS
<i>Wednesdays from 8.00pm</i> Mr M Cook	NEBULA & FAINT OBJECTS SECTION Mr D Payne
<i>Thursdays from 7.30pm</i> Mr P Richards	OBSERVATORY VISITS FROM OUTSIDE GROUPS
<i>Fridays from 7.30pm</i> Mr J Hood	DOUBLE STARS

*All members are welcome on any night, but on nights other than Wednesday please check with the director of the night that the observatory will be open.*

Lectures and other events:

### COMMITTEE MEETING.

The next committee meeting is still to be arranged.

### VISITS:

11-3 99 Felixstowe ATC.

Hosts D Payne & J Appleton

18 -3 99 St Matthews Church Mens Group.

Hosts M Harlow & T Sampson

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WWW url <http://www.ast.cam.ac.uk:80/~ipswich/>

### 1999 COMMITTEE

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SECRETARY  
TREASURER

D Payne  
R Gooding  
M Harlow  
M Cook  
E Sims  
T Sampson  
G Coleman  
J Walsh  
J Appleton  
P Richards

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M. Cook Ipswich IP4 5PZ

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