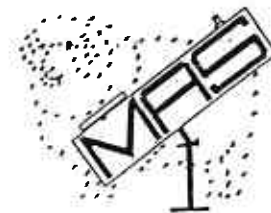


MACARTHUR ASTRONOMICAL SOCIETY Inc.

Newsletter



PRIME FOCUS

Volume 3 Issue 1

February 1998

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President's Report

Happy New Year and welcome to our first official meeting of 1998. I am sure that the select few who attended Monday last month enjoyed, as I did, our discussion led by Noel on the space events that occurred last year. On a personal note, I would like to thank all those members who contributed and helped make it a fun night.

During the summer break the weather, as most of you would have noticed, was cloudy. However, I did manage to view on the occasional night and must say only a few weeks ago Orion was spectacular above, even from light polluted Ingleburn. I also looked around the skies just picking up the occasional small cluster and other unknown stellar objects

Tonight everyone will receive a renewal form. If you have just joined this year or given me a form in the past three months, you are exempt from having to fill one out. Our current membership numbers are approx. 59. If you are one of the few unfinancial members, please give a membership or renewal form with payment to Eric Brown, or send a cheque to the following address.

IMPORTANT-- MAS ADDRESS

Macarthur Astronomical Society
c/o The Secretary
P.O. Box 17 MINTO 2566

Yearly Happenings.

Mars Pathfinder successfully landed on July 5th Aust. time and dispatched a rover which explored the Martian terrain. There were many huge rocks nearby, and mountains seen in the distance, giving a wonderful panoramic view of the country side. The probe landed only 30 kms from the proposed site in the area known as Ares Vallis. This area is south East of Chryse Plantia where Viking 1 landed back in 1976. The rover lasted up to Sol 99 then it is believed the camera could no longer work in the frigid Martian climate.

Global Surveyor arrived in September and has started transmitting some wonderful data since January. It will eventually get as close as 100 kilometres and take pictures up to the size of a car.

Space Station Alpha-- The first module will be launched to early-mid 1998, with a possibility of astronauts living in the space station by 2002.

The MIR Space Station seemed to iron out most of its problems. Earlier last year a routine cargo vessel due to dock with the orbiting space station unfortunately crashed into the solar panels and part of the main section of a science Hab. Module. Power was reduced by 30-40% for quite a while and for 1-2 hours the computers shut down completely leaving the station to drift without any controls, navigation or life support. The crew almost abandoned ship in the emergency Russian craft, but managed to survive the trying conditions. The Astronauts have repaired the damage and Andy Thomas is now spending 4 months up in the aging spacecraft.

Society Activities: The Astronomical Society calendar was also very full, with camps and star nights held every month. Some very exciting guests attended and spoke at our meetings, speakers in the calibre of Paul Butler, Seth Shostak and some wonderful and enlightening talks by some of our own members.

Coming Events:

This year we have some legends in Astronomy talking to us, one being The Rev. Bob Evans (Supernova expert.)

February-- Phil Ainsworth-- Mission to Mars-- The Inexpensive way or Andrew Reid on Galaxies.

March-- Annual General Meeting-- should not go for more than 30 minutes, then a talk from the Light Pollution Officer.

April --Rev. Bob Evans--

We will be having a camp constellation in March (I hope), ring me, Noel or Eric for details. Noel's Ph. No. can be located in Nov. Prime Focus. Also dark sky nights will be held on alternate months to the camp at Burraborang.

All in all a very exciting year is coming upon MAS, lets hope for clear skies and

that Astronomy will remain a fun and exciting venture for all the members.

I must say, it was encouraging to see many MAS members attend the Frank Drake talk. I found the man to be one of the most inspiring speakers that I have and will probably ever meet.

SETI CONFERENCE

What a great and enthusiastic way to start an astronomical year. Dave McBean (Secretary) and I felt that the SETI conference was the most organised and professionally run event we have ever been privileged to attend.

The speakers included legends such as Professor Frank Drake (The Father of SETI), Prof. Paul Davies (who I am sure many of you would know through his books), Dr. Paul Butler, Dr. Ragbir Bhathal, Carol Oliver and many other international and well respected guests from many countries.

Some of the major talks and discussions included whether we should search, and what we should do in an event that a signal is received. The Theological argument, Did God create the Universe, with many creatures or just ourselves.

Over the three days of very rewarding talks the event was concluded to be very successful, and it was hoped another SETI conference will be in the pipe line in the not too distant future, however, probably at a different location and country.

One of the most exciting events of the whole three days was the official starting up of The Southern Serendip search at Parkes which will run for 5 years and search 8 million channels at any one time.

Phil Ainsworth

Apollo 12

After such an historic and successful landing of Apollo 11, the next craft in the Apollo series was launched in November 1969, and allowed astronauts Charles Conrad and Alan Bean to wander over the ancient plains of the Moon, while Richard Gordon remained in the LM. They even walked over to the old surveyor craft which landed back in 1967. To their surprise they found a terrestrial bacterium inside the camera which they retrieved.

Apollo 12 was more of a scientific exploration than the first mission which simply wanted to land, gather some materials and go. The two men on the surface collected 75 pounds (34 kg) of Luna rocks and did many meteorological experiments.

After 10 days in space the crew returned to Earth almost without injury. Alan Bean was hit with a camera inside the landing vehicle during splash down. The injury required 6 stitches to the head.

Phil Ainsworth ■

UPDATED NEWS

Lunar Prospector has been gathering data, and will be studying the polar cap which has a crater with possibly ice inside.

1998 ANNUAL GENERAL MEETING

The meeting in March will commence with the Annual General Meeting which should take less than 30 minutes.

There will be reports by the President, Vice-President, Treasurer and Secretary.

There will be elections held for the following positions: President, Vice-President, Secretary, Treasurer and three (3) Committee members.

Nomination forms are available at the February meeting to nominate any financial member for the above positions. Please hand them in at the February meeting or return to the Secretary no later than 2nd March.

MacDob: The Society's 'Scope

The Committee has established a procedure for the borrowing of MacDob, the Society's own 150mm Dobsonian telescope. Bob Bee has been appointed 'custodian' of MacDob, meaning he will issue and receive the 'scope from those who wish to borrow it.

Bob has established a register of borrowers, as well as a checksheet of components which borrowers are required to sign when borrowing and Bob will sign when MacDob is returned. Borrowers are asked to check that all components are present as per the check sheet, both on receiving and returning the scope.

There is no hiring fee for MacDob. However, to help cover maintenance costs, borrowers are invited to make a voluntary donation consistent with the pleasure that MacDob has given them.

Contact Bob on (02) 46251623 for your loan of MacDob. ■

What's To See This Month

Who saw the "Planets On Parade" show late last year? All five naked eye planets were up on the same nights, waiting to be viewed by keen amateur astronomers. If you didn't see it, you missed a great show. This year, we're not so lucky.

Venus this month is a morning object, very bright at its maximum mag. of -4.6 , with a diameter of $43.5''$. On the 18th of February, Venus rises at 3.38am (DST) and its rising gets earlier as the month rolls on. Its earliest rising is in mid-March at 3.20am, then it starts rising later again.

For you early risers, on 24th February, you can see a close encounter of Venus with the crescent moon.

Mars is harder to see in February, setting in the western evening twilight (where else would it set?). It won't be visible at all in March.

Saturn will still be visible in the latter half of February setting on 18th at 10pm, getting earlier to set on 2nd March at 9.15pm and 10th March at 8.45pm.

Jupiter is out of sight, out of mind.

Uranus & Neptune – both rise late in the morning towards twilight. If you're really keen to view these planets. Check your Astronomy 98 for rising times and locations.

For evening viewing of the stars and deep sky objects, it's easiest to refer to your star wheels. If you don't have one, it's not too late to buy yourself one as a belated Christmas present.

As a few quick guides, Feb/March is a good time for going out and viewing:

Carina (The Keel) with its famous Eta Carinae with its nebula NGC3372 and the

closely surrounding star clusters. Great in binoculars and small scopes. It can be seen a bit south of directly overhead.

The False Cross just near Carina. Just below its bottom star, you can see the naked eye cluster NGC2516. It's as large as a full moon and its 80 stars are resolvable in binoculars.

Orion – you don't need me to tell you how to find this. Feb/March is a **great** time for viewing Orion as it is almost directly overhead, a bit to the north and west. The Great nebula in the dagger looks superb in binoculars, even from a suburban balcony.

Canis Major and **Sirius** are also perfectly overhead. Sirius is, of course, the brightest star in our sky at mag. -1.43 and only 8.6 light years away.

Between Sirius and the distinctive collection of stars to its south, there is a nice open cluster (about 80 stars) called M41. This is easily visible through binocs and small scopes.

If you find the 4.4 mag. Blue supergiant τ Canis Majoris (at the bottom of that collection of stars I referred to earlier) small scopes will show a compact cluster of about 60 stars surrounding it. The blue supergiant is a member of that cluster.

Cancer – looking north, there is the constellation Cancer that looks like a big Y, with the charming Beehive Cluster (M44) smack in the middle. This is one of my favourites.

Hyades/Pleiades – These are getting lower but are still visible to the north west. Always a great sight in binoculars and small scopes. Check out Aldaberan, the red giant that forms the Bull's eye.

Good Seeing!

Bob Bee