

MACARTHUR ASTRONOMICAL SOCIETY Inc.

Journal



# PRIME FOCUS

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## President's Report

Yes folks!! Our Annual General Meeting is on our doorstep again. Has it been 12 months already? As always, a big welcome to all the members and guests and I'm sure I can call upon your support and patience whilst we attend to our A.G.M. formalities.

### Last Month

Our appreciation to Dick Everett for an excellent presentation on the Greenwich Observatory. A real insight was given to this famous observatory's historical significance. I loved the stories about the Harrison Clocks - just great. Well done Dick!

The public open night on the 3rd March was a decision makers nightmare, the weather teasing us all day with its intentions. We

decided to proceed rain, hail or shine and over **fifty people** attended. Attila's scope was the first one into action and was besieged by the eager public. The other scopes soon followed but only **20 minutes** of viewing was possible as the clouds took away our sky. With Daniel's assistance I gave a presentation on basic astronomy which enlisted the eager help of the many youngsters present. Overall it was a great night.

### This Month

**Dr Ragbir Bhathal** will speak about Optical S.E.T.I. It should be really exciting. The Observatory Public Night on the 28th April will be expanded to accommodate Science Week. Dr Fred Watson will be the guest speaker. It's planned to have displays of telescopes by Bintel, Sky & Space Magazine and Terry Storey's "Your Optical World". This will be a huge night so we

need every telescope we have to be set up near the domes and as early as possible. I think Dr Watson's talk will start at about 6pm.

### Next Month

We will be back at the Airfield on the 19th May and then at the Observatory on the 26th May.

Our special guest speaker for our normal monthly meeting on the 21st May will be Variable Star researcher **Peter Williams**. He is also a regular contributor to Sky & Space Magazine, it should be a great night.

Noel Sharpe. ■



## What's to See This Month?

April 15 - May 20, 2001

Usually **Meteor Showers** are best seen in the hours before dawn, but from April 15<sup>th</sup> to 28<sup>th</sup> the Puppids can be seen in the south-east evening sky very high. Hourly rate is not many but should be bright. The Lyrids should also appear from the north-west from 2am to dawn with a maximum on the 21<sup>st</sup>.

### Trivia Question Answer

Is the Solar System Centre of Gravity in the Sun? Usually the answer would be Yes! But this year and until 2003, it so happens that the Solar System "Barycentre" is outside the physical border of the Sun's globe.

I don't know why this is so, probably something to do with positions of the planets, but ask some of our more learned members

### Sky Measurements

A convenient way to measure altitude and azimuth is to use your own hand span. Because of my small hand the distance between the tip of my thumb and the tip of my little finger, when outspread as far as I can make it, is + or - 15 degrees. Measure your own hand span by stretching your arm out level with your shoulder, and counting the hand spans until your arm is vertical. Try to be accurate if you want it to help you later. My hand span equals 6 to get 90° above the horizon, 3 for 45°. This is

helpful when directing people at public nights. It also works for around the horizon too.

**Venus** has gone from the evening sky but can be seen one hour before dawn on the 21<sup>st</sup> with the last sliver of the moon. It is in an area of sky with no bright stars so it shines brilliantly

**New Moon** is on 24<sup>th</sup> April and **Full Moon** on 7<sup>th</sup> May.

**Jupiter and Saturn** are very close to the western horizon still in Taurus in the evening sky. Jupiter is moving backward away from Saturn to take up station in Gemini for 2002. If you have a clear west view on 25<sup>th</sup> April (Anzac Day) just after sunset look for a thin crescent Moon, Saturn and Jupiter in line 6 - 8° apart. On 26<sup>th</sup> at 11pm Jupiter and the Moon sliver will be very close. Mercury will be between and below Saturn and Jupiter on 11<sup>th</sup> May about 5.30pm and on the 15<sup>th</sup> Jupiter and Mercury will be alone in the western sky at sunset 3° apart.

**Mars** is now rising before midnight and can be seen a mere 2.5° from M8 in Sagittarius at 10.30pm on the 30th. There is no moon so should be a nice view. At -2 mag. the god of war is at its nearest to Earth since 1988 and is preparing for a bright show in 2003. Mars will stay almost stationary in this spot for the next two weeks but on 6th April a full moon will make it difficult.

**Uranus and Neptune** in Capricornus are in retrograde motion till October. They are moving quickly now and will rise before midnight on 28th April. Uranus is very close to  $\delta$  Cap (Deneb Algedi) and Neptune is near  $\beta$ .

**Comet 24P/Schaumasse** is at perihelion (closest to the Sun) and having brightened during April to 10 mag in Auriga will fade to 11 mag. It can be seen moving in Auriga to Gemini and then to Cancer.

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### Trivia Question?

What does 'Planet X' mean? Who discovered it and where is it?

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### Favourite Star of The Month

A survey of some MAS members (new and old) has resulted in starting a list of favourite stars. Noel Sharpe likes Canopus in Carina. A 1st mag golden white star available most of the year. Why? Because when slightly defocussed by eyepiece it has lots of brilliant spidery lines which looks like fairy dust and kids love it on public nights.

A favourite star is not based on technical or astrophysical merit. It should be naked eye, therefore not just available to telescope owners, and it has to evoke some feeling response within you. In other words you don't have to justify your selection. You just like it!

Good seeing IC

## President's A.G.M. Report

Dear Members, Our A.G.M. is the forum in which we hold ourselves both responsible and accountable to officially report to the membership the activities, outcomes and achievements since our last A.G.M. in March 2000, and I might say when reviewing the year we have been very active indeed.

## Our Field Nights

These nights are dedicated to the hands on use of telescopes and provide invaluable experiences in object location, general astronomy, Messier hunting, photography and networking with other members who share similar interests. It's also a great time to socialise. You don't need to own a telescope to attend. However, you must be a member of M.A.S. or be an invited guest. We have arranged 20 such nights, however the weather has forced some last minute cancellations and has constantly been a thorn in our sides.

## Meetings and Speakers

Not including tonight, 11 monthly General Meetings have taken place, all were well attended with some fantastic guest speakers who provided us with a diverse range of astronomical topics.

eg. **In 2000:** 17/4 Aboriginal astronomy, **Dr Ragbir Bhathal;** 15/5 Anglo-Australian Telescope 2DF research project **Dr Russell Cannon;** 19/6 Ancient astronomy, comets and the solar system, **Attila Kaldy;** 17/7 Video presentation of "The Sun" courtesy of **John Rombi;** 21/8 Astrophotography and the Magellan observatory farm stay, **Zane Hammond;** 18/9 S.E.T.I. research project attached to the Parks Radio Telescope, **Dr Frank Stootman;** 23/10 Cosmic Controversies, **Dr Fred Watson;** 20/11 Spectroscopy, analysing star light and various experiments, **Don Neely;** **In 2001:** 15/1 Capturing the faint stuff, advanced astrophotography, **Peter Druery;** 17/2 Third Dimension of Gravity, personal theories by **Robert Zindler;** 19/3 Historical Greenwich Observatory, **Dick Everett.**

## Special Events

6/5/00 Astronomy, **Life in the Universe**, University open night Dr Russell Cannon. Over 400 people in attendance. The first public workout of the Campbelltown Rotary Observatory. 29/6/00. **Night Skies, The Art of Deep Space.** Campbelltown Bicentennial Art Gallery, guest speaker, David Malin.

July to December 2000, regular Friday night viewing at the observatory, bookings were required and all the sessions were booked months in advance. Ragbir Bhathal organised M.A.S. members to assist with this program.

## Other Activities

The new Public Observatory Program is working very well with four events being held, as you know the dates are planned for the rest of the year and we have been getting some great crowds. We have also held presentations as follows: Leumeah Scout Group, Japanese Students, Cawdor Public School, and the Narellan Congregational Community. Our Christmas Party around the Observatory domes was held on the 9th of December and was well attended.

## Acknowledgments

We have done remarkably well this year and this is directly attributable to the wonderful efforts of our members. I'm very mindful that I might miss someone and if so please accept my apologies in advance. For the public record, I wish to thank the following people: **Phillip Ainsworth**, for having the courage and enthusiasm in starting our club and being President from 1996 to April 2000. Our Society would not exist without Phillip.

**Daniel Ross**, Vice President specialising in telescope design, membership badges, website and technical support for the Observatory.

**John Koster**, Our Treasurer, at times a thankless position, but not tonight!. John, thanks for all your on-field help with our newer members and guests, and for your strong support of our club.

**Peter and Bobbie Elston**, thanks for all your hard work with the new constitution, the Messier hunting and providing us with some great guest speakers, also for promoting M.A.S. far and wide and for all the input you have given me. We also appreciate the tea and coffee that you provide for our meetings, as well as opening up your home for the committee meetings.

**John Rombi**. Apart from attending nearly every event and field night and providing assistance to new members, I would like to express my special thanks for the hours of work you put into copying my reports and stories onto computer disk for Prime Focus, (embarrassed!! JR) as well as providing this service for other members that don't own a computer.

**Peter Druery**, for all your support and help in guest speaking, astrophotography and for making yourself available at all times to assist Ragbir with the observatory. Thanks Peter.

**Ragbir Bhathal**, Director of the Campbelltown Rotary Observatory and providing us with the room we meet in

every month, Ragbir also has many new ideas and I appreciate everything he has done for our society.

**Bob Bee**, We are very fortunate that we have a monthly journal of such quality, a lot of hard work goes into Prime Focus, not only the writing but formatting, printing and compilation as well. Bob's regular articles in The Chronicle called "Heavens Above" not only provide public education, but also promote our Society. What can I say except, thanks Bob!  
**Dick Everett**, He not only has a great knowledge of the night sky, but is also a talented inventor. His binocular stand, Dobsonian tracker and low light camera scenes provide an excellent and fun way for members of the general public to view the heavens at our observatory open nights. Thanks Dick!

**Ian Cook**, for writing "What's to see this Month" in Prime Focus this year (*there. Ian, the secret's out - Ed*), he also has provided assistance on our field and public open nights and he has also been a strong supporter of our club.

#### Other Acknowledgments

The public education events, eg schools, scouts etc have been organised and attended by (from memory) John Koster, John Rombi, Dick Everett, Phillip Kidd, Ian Cook and Bob Bee. My thanks also to Terry Storey for his strong support

of our Society. Two other members, Attila Kaldy and Lloyd Wright for always lending an ear when needed.

#### In Conclusion

As you can see many members contribute in various ways to make our society successful and I'm sure that the coming year will be just as great as the one just past.

Noel Sharpe. ■

#### Official M.A.S. Program

##### Key:

**Oaks** = Airfield (members only)

**GM** = Monday General Meeting

**OPN** = Observ. Public Night

**(TBA)** = To Be Advised

23rd April	GM plus A.G.M
21st April	Oaks
28th April	OPN
- Plus guest <b>Dr Fred Watson</b>	
19th May	Oaks
21st May	GM
26th May	OPN
18th June	GM
23rd June	Oaks
30th June	OPN
16 <sup>th</sup> July	GM
July Oaks	(TBA)
28 <sup>th</sup> July	OPN
20 <sup>th</sup> August	GM
August Oaks	(TBA)
25 <sup>th</sup> August	OPN
17 <sup>th</sup> September	GM
22 <sup>nd</sup> September	OPN
September Oaks	(TBA)
13 <sup>th</sup> October	OPN
15 <sup>th</sup> October	GM
October Oaks	(TBA)
10 <sup>th</sup> November	OPN
19 <sup>th</sup> November	GM
November Oaks	(TBA)

**Income & Expenditure Statement for the Year ending 28 February 2001**

	2001	2000
	\$	\$
<b>Income</b>		
Membership Fees	1705.00	1590.00
Donations	20.00	102.00
Raffles	300.30	155.00
Interest	11.75	2.21
	<u>2037.05</u>	<u>1849.21</u>
 <b>Expenditure</b>		
Equipment Purchases	564.90	136.97
Bank Charges	7.96	7.51
Filing Fees	37.00	50.00
Insurance - Public Liability	279.95	254.96
Internet Registration		250.00
Miscellaneous Expenses	36.50	56.00
Postage	70.80	82.74
Printing of Prime Focus	528.96	252.25
P.O. Box Rental	48.35	45.00
Telephone	20.70	18.89
Other (Depreciation - last Year)		173.00
	<u>1595.12</u>	<u>1327.32</u>
 Operating Profit	<u>441.93</u>	<u>521.89</u>
 <b>Other Appropriations</b>		
Asset Replacement Reserve	250.00	200.00
 <b>Unappropriated Profit at 28 February 2001</b>	<b>191.93</b>	<b>321.89</b>

**Notes**

**Membership Fees** are inclusive of \$455.00  
Advance membership renewals for 2001/2

**Equipment Purchases** relates to Red Flashing  
Lanterns, Extension Lead & Earth Leakage Unit,  
35mm Projector.

**Miscellaneous Expenses** relates to purchase of  
Raffle Prize and Ex Gratia payment for last years  
Audit.

**Printing of Prime Focus** increase is as a result of  
Printing by a commercial firm.

**Bank Balance** at 28 Feb 2001 was **\$2739.47**