

MACARTHUR ASTRONOMICAL SOCIETY Inc.

Journal



# PRIME FOCUS

Volume 11 Issue 6

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## President's Report

A big welcome to all members and guests. Tonight it gives me great pleasure in announcing Melissa Hulbert as our special guest speaker. Melissa's topic tonight is titled "Capturing The Cosmos". Melissa Hulbert has a Bachelor of Science (Honours) in Physics/Astrophysics and has been a member of Sutherland Astronomical Society for over 14 years.

She has worked for Sydney Observatory for over 13 years and enjoys bringing the wonders of the night sky to interested people. In the past Melissa has worked as an Assistant Editor/Science Journalist for 2 Australian science magazines and has written presentations for Swinburne University's on-line astronomy courses. She was part of the 'Science in the Pub' team that won a Eureka Award for Science Promotion in 2000. She currently supervises student projects at Swinburne and teaches astronomy at a local community college.

When time allows Melissa likes nothing better than venturing out under the stars (with a few friends) and photographing the night sky.

On behalf of everyone here tonight we thank Melissa for taking the time to visit us.

## Last Time We Met

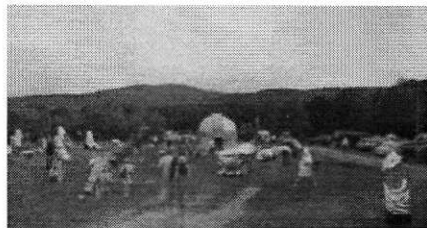
At last month's meeting we were privileged to listen to Don Whiteman's presentation on "Stellaphane".



Don Whiteman

It was great to hear all about Don's trip to the USA in particular the Nagler and Meade factories. Don spoke a fair bit about Meade's arguably best scope, namely the RCX Advanced Ritchey Chretien, a telescope of amazing features. Many of us know Don personally and his expertise in the area of telescopes and related equipment is truly outstanding.

You must excuse this little president's ignorance but I had never heard of "Stellaphane" before last month. The presentation given by Don was truly inspirational, all those incredible looking telescopes of elaborate designs and outstanding optical qualities being paraded before the judging panel. Wow!



The world's first official star party was held at Stellaphane over 50 years ago. Since then it has been revered as the birthplace of

amateur telescope making. With all the memories that exist for thousands of amateur astronomers from all over the world who have journeyed to Stellaphane and plonked down a scope upon the breezy hill there is a wonderful friendliness and atmosphere about it all.

Just imagine knocking down a few beers or two whilst stargazing with likes of Al Nagler, David Levy and John Dobson. Not a bad lineup of legends gathered in one place. I am feeling rather more educated now and it has really dawned on me how far reaching amateur astronomy is, to every corner of the globe and beyond. ■

### The Dates

24/06/06 The Forest  
 01/07/06 Stargard Field  
 17/07/06 Monthly Meeting  
 22/07/06 Magellan Observatory  
 29/07/06 Stargard Field  
 05/08/06 International House Students night  
 The Forest, (to be confirmed)  
 18/08/06 Science Week night at Macarthur  
 Anglican High School, (to be confirmed)  
 19/08/06 Stargard Field  
 21/08/06 Monthly Meeting  
 26/08/06 The Forest  
 02/09/06 Macastro Star night, Stargard field  
 16/09/06 Stargard Field  
 18/09/06 Monthly Meeting  
 23/09/06 The Forest  
 14/10/06 Macastro Star night, Stargard field  
 16/10/06 Monthly Meeting  
 21/10/06 The Forest  
 18/11/06 The Forest  
 20/11/06 Monthly Meeting  
 25/11/06 Stargard Field

August looks really busy at the moment, I am pretty sure the dates will stick but I am aware that both International House and the Macarthur Anglican High school may be looking to amend their dates, but this has not been decided so I thought I would put the dates up anyway as that's the information that I have at the moment.

The Oaks Airfield still remains in the fold so to speak as one of our most favored observing sites. However we have transferred the scheduled nights that we were going to have at the airfield over to the Stargard field. We will use the airfield for off schedule nights, of which we have already done some mid-week observing previously. The Airfield is ideal for this as all other dates must be pre scheduled. The "Critical MAS" emails will inform you of these nights when they come up.

I have taken somewhat of a liberty in detailing all the dates to hand as it's easier for me to save it on the computer and pull it up for next month's report. The Forest and Stargard Field dates have been booked in and confirmed with the relevant people, of course and as always sometimes things do crop up, so please look out for any "Critical MAS" emails which will detail amendments. Also make sure you refer to the latest edition of Prime Focus as I will change dates if needed as soon as I can. Of course look at the website for any Public Nights and special announcements.

I may at this point thank all those members who were going to help out with the Kids Plus night that would have been held the 1st of June, the weather was a shocker and unfortunately we had to cancel this event. At time of writing there is a ton of rain about and its turning out to be a classic winter, even

predicting snow and blizzards on the highlands. Too bad were not scheduled down at The Forest as I could have tried out my new freezer suit, or stayed inside next to the fire with a glass of port!

## Space Cadets

By the time you are reading this we will have had our 3<sup>rd</sup> Cadet meeting. Due to the timeframes in publishing Prime Focus I cannot report on last Thursday's meeting however the meeting that was held last month was just fantastic with an attendance of 15 eager Cadets, which included the grown ups.

The idea is really simple. For an hour or so we talk about very basic items related to astronomy, like space flight, telescopes and the latest discoveries. We then have some car park observing with a telescope to get some hands on experience. I will then post a quiz on the Space Cadets page on our website which will be followed up at the next meeting.

The meetings have been a lot of fun. It's somewhat of a balancing act though, when one minute you are talking to a 6 year old and the next a parent. What is great is that the parents are learning something as well. If you are currently a member of MAS and especially if you are a new to this hobby and want some help from the very start why not pop in.

Full details can be found on the MAS website, [www.macaastro.org.au](http://www.macaastro.org.au)  
Just click the link to Space Cadets.

## Stargard Field

The last scheduled night was unfortunately a washout. However we have now locked in a schedule that takes us to the end of the year. This will enable us to make a full assessment of the suitability of the field for our future goal of perhaps building an Observatory on the site.

Of course this may be a long way off. At the moment we have been successful in gaining permission to use the site, hold public events there and hopefully I should be picking up the keys to the field next month. Whilst there is no ongoing rental or lease agreement for us to use council land I am aware that a yearly administration fee may be payable. At this stage no formal approaches have been made to us so I will let the matter rest until formally advised.

Council has also asked us to submit a development plan for our proposed Observatory. We are not quite ready to do that and obviously this will need some planning. That just about brings everyone up to speed and now you guys know about as much as I do. Of course I will detail any further developments when they come in.

Having said all that getting the Cadets up and running has been a priority for me. Recently I have been approached by some members who wish to play an active role in helping out with the Cadets which is great. This may allow some opportunities for me to progress the Stargard idea along a bit faster.

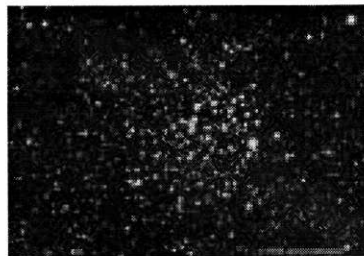
## In Closing

Well that's about it from me. We are certainly coming into a really exciting period for the

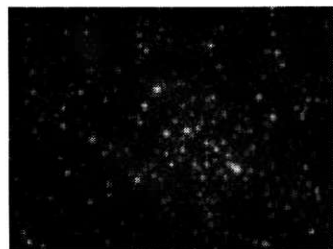
club. We have some great guest speakers coming up, the Magellan Observatory visit is almost upon us, Space Cadets are blasting off all over the place and Stargard Field dates are locked in, watch out for any Critical MAS emails as we use the Airfield sometimes during the week.

I am hopeful of taking out into the field a new addition to my family. It's a new telescope, well almost. I finally received my 12 inch tube rings and now I am just waiting for my optical tube to come back from the painters. When all is ready I toss it on the EQ6 mount and cross my fingers. So far early results look promising as I prepare my overseas trip to Stellaphane. I am going to parade my new scope before the judges, see what you think of this one Mr Nagler! One small problem is when the telescope is mounted it's bigger than me, might give Stellaphane a miss this year!

Kind Regards  
Noel Sharpe

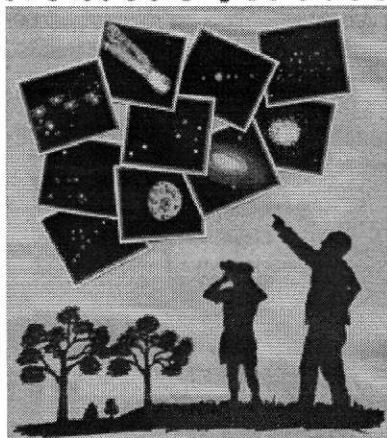


M52



M103

# Heavens Above!



**A Binocular Guide to  
the Southern Skies**

**Robert Bee**

Yes, I know – this is a blatant plug for my book, but if I won't plug it, who will?

Those of you who have been around for a while will know I published a book by the above title in December 2004. It was a result of a dream of mine, supported by my friend and publisher Evalt Crabb, who had faith in me and my idea to publish this 'niche market' book. After a quick print run of 25 copies to see me through over Christmas 2004, Evalt was going to come back from a January holiday and run off the remainder in batches of 100.

Unfortunately, this never happened as Evalt suffered a stroke in February 2005 and just as he had recovered in June 2005, he was killed tragically in a car accident.

I had to take on the publishing of the book myself (other publishers were too expensive to realise a reasonable sale price), resetting type, format etc, which was, to say the least, an interesting experience. I also took the opportunity to completely review the content of the book, adding new details, whole sections, plus some new diagrams and photographs. Thus it became an 158 page Edition 2 instead of 152 page Edition 1.

Believe it or not, this took another 12 months of editing, proof-reading, re-editing etc before I sent it off for 500 copies from the printer, SNAP. They have been delivered, now all I have to do is sell them. That I hope to do through a number of shops locally, plus some outlets in the City (yet to be confirmed). Also, I hope to sell them through personal contact at club and Gardens star nights, speaking invitations etc.

So, if you are looking for a gift for a friend or family member (or even one for yourself to get some use out of those binoculars in the cupboard), please feel free to come and see me or go to one of the shops selling it in Campbelltown or Camden. I will always have copies on me at MAS meetings if you'd like to see one.

Bob Bee

## Sinking Venus

On my journeys up the Camden Valley Way in the very wee small hours I manage to grab a glimpse of the passing parade that is the pre dawn sky. Always being a night owl I now find myself rising to greet the working day at a time when previously I may have retired to bed.

Even when the great roller door of life opens in the morn, i.e. my garage door, I find some opportunities to observe for a quick minute the great southern sky, which is really quite dark at 4.00am.

Upon exiting the driveway successful without knocking over the letterbox - yes it did actually happen - the northern sky presents itself, still some sky glow but if ever motivated, or silly enough one could do some good observing just off the road, just watch out for the numerous foxes that appear out of no where.

It's best for now to observe from the warmth and safety of the car windscreen. The Valley Way snakes its way up to the M5 and the northern sky takes a definite left turn and the eastern sky becomes my new traveling companion.

I have seen Jupiter blazing brightly and some fantastic conjunctions have appeared that only the Moon can conjure up. Also I have seen Scorpius and Sagittarius rise, quite a sight. But what really has made me think is that over the last few months it's been the "Morning Star" that has captured all the early morning glory, that is until now.

Where is Venus? It's now much lower in the sky and not as bright. Boy, before she was brighter than my four IXL heat lamps first thing in the morning. Well I have to blast the sleep from my eyes somehow.

It's been about 2 weeks since I seen my traveling companion, lots of rain and clouds especially when your closer to the seaboard, so now Venus is slowly sinking in the dawn sky and becoming a tad fainter.

The story gets worse as I will lose track of her completely, well until she metamorphoses into the "Evening Star" in late November, but then I don't go to work in the evening. I guess will have to find another early morning traveling companion.

Regards

The bleary eyed and desperate stargazer.

## Northern Sky – an Icy Adventure

In May this year, Marion and I undertook a holiday of a lifetime and travelled to the northern hemisphere to see the northern starry sky. Oh, we were also going to have a quick look at Canada and Alaska while over there.

The holiday involved a coach trip over the Rocky Mountains in Canada from Vancouver to Whistler, Sun Peak, Jasper, Lake Louise and Banff. Then there was a two day Rocky Mountaineer train trip back through the Rockies to Vancouver. Then a seven day cruise up the Alaskan Inside Passage as far as Skagway and Glacier Bay. This took us as far north as latitude 58°N.

My aim was to use the opportunity to try to spot the various constellations I would never see from Australia (at least in NSW) and also, with my trusty binoculars, claim some more Messier objects for my totem pole. As is usual for these ambitions, things didn't turn out as simply as I hoped.

Before leaving, I did my homework and identified those Messier objects which are best (or only) seen from northern climes. This included M34 (Perseus), M39 (Cygnus), M40 (Ursa Major), M51 (Canes Venatici), M52 (Cassiopeia), M56 (Lyra), M76 (Perseus), M81 & M82 (Ursa Major), M92 (Hercules), M97 and M101 (Ursa Major), M103 (Cassiopeia), M106 (Canes Venatici), M108 and M109 (Ursa Major).

Of course, I then realised that the following needed a telescope to be seen: M40, 56, 76, 82, 97, 106, 108 and 109. As I was only taking my binoculars, scrub them off the list.

That only left M34, 39, 51, 52, 81, 92, 101 and 103 as potential targets. Sigh! Oh well, eight is better than none.

One thing I hadn't allowed for – at those latitudes in spring, the Sun sets very late. Veeeeerrrry late! At Skagway, the Sun was setting around 10.30pm, with full darkness around 11.30pm. That made it very late and very cold viewing.

On our first night in Victoria, Vancouver Island, I tried to kick off my mission by leaving my warm hotel room at about 10.30pm, all rugged up, binoculars around neck and star chart and mini-torch in hand. In a back garden I found a darkish spot away from the harbour lights, but it was blowing a mini-gale so I had to hold my charts very tightly.

I was very pleased that by following the chart carefully, I was finally able to be confident I had found Polaris, the Northern Pole Star. It looked like an ordinary 2<sup>nd</sup> magnitude white star, but at least I could say I have seen it. Of course, it led me to the Little Dipper (Ursa Minor - The Little Bear) and I could see where the asterism got its name. Much more obvious and to Polaris' west was the Big Dipper (Ursa Major – The Great Bear).

I just sat there for a while, taking it in. I think it was at that point, sitting in the biting cold, wind buffeting my ears, staring up at these unfamiliar constellations, that I suddenly felt I was actually on the other side of the world. Up to then it had just been a long plane trip, traffic, buildings and a hotel. I think it was also at that point that I started to develop a mild head and chest cold that gave me trouble though the rest of the holiday.

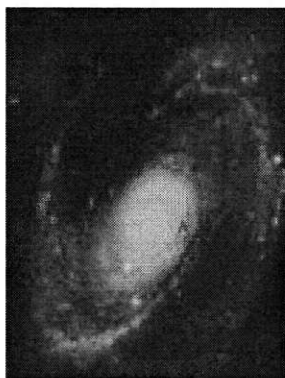
After Victoria, we travelled by coach back to the mainland and on through gorgeous snowy mountain countryside to Whistler, the famous ski resort. That night (very late), I ventured out onto my hotel room's balcony garden and set up my gear for more viewing. Thankfully, my view was to the north and vertical. I could just see Ursa Major and Minor and Cassiopeia so some Messiers were up for grabs. Unfortunately, Cygnus, Hercules and Perseus were hidden either by the building behind me or the horizon. That blew M34, M39 and M92 off my list.

I should have been able to spot M51, M52, M81, M101 and M103. So how did I go? I had a clear view of Ursa Major and its area, but unfortunately Whistler is a tourist town and there was a fair bit of light pollution, not helped by the reflection off all that mountain snow. M51 was always going to be stretch



with binoculars, so I wasn't surprised that it couldn't be seen at its spot. M101, a mag 7.9 globular (another stretch) was also not showing itself that night.

I did better with my next targets. M81, just below the Big Dipper, was where the star chart said it should be. A mag. 6.9 galaxy, it was no Hubble ST image, but its blurred shape, more a smudge, was right on target, so I claimed it as my first Northern Hemisphere Messier.



M81

Next I found the constellation Cassiopeia, a distinct 'W' in the sky closer to the northern horizon. Doing some star hopping from my chart, I found a faint cluster of stars right where M52 (a mag. 6.9 open cluster) should be. It didn't really knock my socks off, but I put it down to the light pollution. There were not as many stars as expected but again I put that down to light pollution. I took my gaze away and came back to it. Yep! Still there. It had to be M52, so I stuck that scalp up on the totem pole too. (Very appropriate as we had seen a whole lot of totem poles on the tour that day.)

Finally, I star hopped to where M103 (a mag. 7.4 open cluster) should be at the other end of Cassiopeia. Right on target, there was this faint smudge of stars, definitely an open cluster but only just discernible. Again I went away from it and came back and it was still there. So I claimed M103 for my totem pole.

I was a bit disappointed at how faint they were but at least I had seen them. I determined that I would take more opportunities over the remainder of my trip up north to revisit these objects in darker locations, as well as get a view of Hercules, Cygnus and Perseus for the other Messiers.

Well, the short story is that at the other hotels on the overland trip, the available sky scapes were even less favourable and the light pollution from the hotels were unforgiving. The cruise, I thought, out there on open water, late at night. No... a combination of a developing chest cold, 5° temperatures plus 25 knot chill factors on the upper open deck at midnight put paid to that. So, apart from quick re-acquaintance with Polaris and the Big Dipper from my cabin's verandah, I never got to do any more meaningful astronomy.

Still, I bagged three new Messiers and had the pleasure of seeing Polaris and its accompanying Bears, so that's something. Next I'm planning a trip to Scandinavia (goodness knows when) so I might do better then. But I'll have to remember not to do it when the Sun sets at 10:30pm and rises at 4.30am.

Bob Bee