



PRIME FOCUS

Inside this Issue

Observing Dates	2
On Guard at Stargard	6
Oh What a Night	9
For Sale	10
Grand Viewing	10
Appreciation	12
In Brief	12

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Presidents Report

Noel Sharpe



A very big welcome to all our members and guests here tonight. There is certainly a lot to write in this first Issue of Prime Focus for 2007. I tend to waffle on a bit at the end of a report, so in advance I respectfully seek your indulgence.

Firstly, as announced at the end of last year, we have a new editor for our journal, namely Kate Johnston. Kate has been a member of MAS for several years and is well known to many of us. On behalf of the society I wish her well with the journal.

I also wish to extend our appreciations to Bob Bee; Bob has been the editor of Prime Focus for over 11 years and is a

founding member of the society. Bob has devoted considerable time and effort to bring us the journal every month and concluded his duties last year with Volume 11 issue 11.

As a side note, I attended the 2nd meeting of MAS held in February 1996 and later accepted the role of Vice President in June 1996. We had a number of important things to sort out in those very early days and Bob's continuing input and support of the society has proven to be fundamental in bringing us the success that we have enjoyed over many years.

Bob has held court over a great many star nights and as you all know has a regular series of articles in the Chronicle Newspaper titled "Heavens Above". He has also released his own book on binocular viewing and held special viewing nights at the Mount Annan Botanical Gardens.

I wish to publicly thank Bob for everything he has done with "Prime Focus" and in speaking to Bob, both he and myself give our blessings to Kate to

put her own style and creativity into "Prime Focus - the next generation".

TONIGHT

Our guest speaker tonight is Mike Salway, Mike is the founder and administrator of "Ice and Space". I know many members are regular visitors to the Ice in Space website and community forum. The website provides an invaluable resource to amateur astronomers both here and in New Zealand, on behalf of the society I thank Mike for taking the time to visit us tonight.

Next month Bob Evans will pay us a visit, as you are all aware Bob is in a class of his own as holding the all time record for visual Supernovae discoveries, should be a great night. By the way there was a great write up on Bob Evans in the Jan/Feb issue of Australian Sky and Telescope, well worth a read!

LAST MONTH AND THE TIME BEFORE

It was just a catch up meeting last month and an opportunity to touch base with many members after the Xmas and New Year Break. I hope everyone enjoyed the presentation on Saturn. Unfortunately I wasn't able to attend the meeting but I heard tales of intrepid astronomers searching the skies for a comet. I believe the endeavor was most successful and subsequently the comet has now proven to be one of the most spectacular objects ever seen in the night sky.

Eager to catch the Comet again a whole heap of us ventured to the Forest on January 20 and set up cameras and scopes at the side of the road, looking for just the right vantage point though the trees, the guys were visited by a nearby property owner who suggested a relocation to take advantage of their clear and dark horizons.

What a wondrous night we had, splendid by all accounts and just magnificent, a straight view to the horizon spanning

some 360 degrees. Armed with a bevy of scopes and cameras we eagerly awaited for the comet to break through the sunset glow. It took a while and I remember looking around the field thinking, gee all this equipment and "Expert Astronomers" and no one can find the comet, quite comical really when combined with "There it is, sorry no it's not". Then it happened, the majestic glow of an interstellar visitor to our shores, words cannot describe the marvel that we saw that night.

OTHER MATTERS

The Campbelltown Rotary Observatory night held on December 8th was unfortunately a clouded out affair, however several members made themselves available to a small crowd of about 25 eager stargazers who were very optimistic indeed!

We have received a list of dates for the year ahead but we need to confirm these against any commitments we might have, just to be prepared I have included the dates below, they should be OK but watch for the Critical Mas emails just to be sure.

OBSERVING DATES

- 17/03/07** The Forest, To be Confirmed
- 19/03/07** General Meeting
- 23/03/07** Campbelltown Rotary Observatory, To Be Confirmed
- 24/03/07** Stargard
- 13/04/07** Campbelltown Rotary Observatory, To Be Confirmed
- 14/04/07** Stargard
- 16/04/07** Annual General Meeting
- 21/04/07** Magellan Observatory, To Be Confirmed

In November last year we had as our guest speaker Tim Bedding from the University of Sydney, Tim gave an expert talk on his research into "Astro Helioseismology" and explained how modes of pulsations of the stars can be interpreted scientifically.



I found the comparisons of data between our own Sun and Alpha Centauri to be very interesting. It was a detailed and fascinating lecture, Tim Bedding's home page is easy to find on the Internet and will give you much more information, its well worth a look.



Over the holiday break we continued stargazing and had some great field trips, unfortunately some were clouded out as well. When time permits I have certainly enjoyed my travels to The Forest and Stargard sites. If you haven't done so, make the effort to venture, as these are superb sites for stargazing.

IMPORTANT ANNOUNCEMENTS

As we mentioned late last year and at the meeting last month we need to adjust the membership fees by a modest amount of \$5.00 across the board. This decision is made partly due to costs that we incur in providing accommodation, small gifts etc to guest speakers and our public liability insurance renewal.

ANNUAL GENERAL MEETING

We have our Annual General Meeting coming up on the 16th of April. Nomination forms for positions are held in the back of the attendance book, you have until the 2nd of April to lodge an application for positions with our secretary, Mr Ian Cook

STARGARD

The Stargard field has proven itself to be a great observing site and holds much promise should we decide to house a large telescope on the site. Last year as it happened the society was made an offer to purchase a very large 30inch telescope. When the offer came about I progressed forward our long-term plans and went about trying to gain some financial assistance in order to purchase the telescope.

Unfortunately we have not been able to secure the purchase of the 30inch SDM telescope for use at our Stargard field site and the offer is now off the table, so to speak.

However discussions have taken place with Peter Read from SDM telescopes and a couple of other options have been presented to us for future consideration.

With the assistance of Pat Farmers office we have been assigned a project manager from a government department to assist us in gaining the best possible chance to secure any partial financing we are seeking, should we wish to proceed along those lines. However other avenues of obtaining a grant have unfortunately been unsuccessful.

BIG NEWS, well for me anyway!

I mentioned earlier in this report that I accepted the Vice President's role of our society in June 1996, in fact it was the May meeting that year which sticks in my memory. Phillip Ainsworth not only founded the society but was also the President at that time, a couple of unexpected vacancies came up and he was looking for a secretary and a vice president to give him a hand in running the society.

I made my mind up to see Phillip after the meeting and express my interest in the Vice Presidents role.

After the meeting several members gathered to talk to Phillip, including myself. The line gradually got shorter and the others that were in front were only engaging in "chit chat". I was very excited and had only one guy in front of me, I should not have been listening in, but I was nervous and keen to put across my credentials for the job, actually I had no credentials but that's beside the point.

David McBean was the member in front of me, he approached Phil and enquired about the vacant positions. Phil was most keen to have some help so he intently listened to David, I thought well there goes that dumb idea, what was I thinking!

The Secretaries role sounded like hard work, I didn't know how to type or use a computer, and in fact I didn't even have one, so I thought I would not be able to contribute to that role. But as

fate would have it David was enquiring about the Secretary's role, you little beauty! My turn, my turn, and with guarded excitement I expressed my interest in the Vice President's role.

I was very happy to serve in that role from June 1996 to April 2000, In March 2000 Phillip Ainsworth I expressed my interest in the Vice President's role. I was very happy to serve in that role from June 1996 to April 2000, In March 2000 Phillip Ainsworth I expressed my interest in the Vice President's role. I was very happy to serve in that role from June 1996 to April 2000, In March 2000 Phillip Ainsworth I expressed my interest in the Vice President's role.

A lot of behind the scenes maneuvering took place; the society had some very qualified members any of who would have made excellent presidents. At that stage I was happy playing a supporting role and would have been most able to do so going forward at that time.

As it happened I accepted the role in April 2000. Now I am approaching 7 years as President, combining that with my 4 years as the VP I believe the time has come to stand aside. It's been a big year for retirements really, I am actually going to play a bit of backyard cricket with Warnie, McGrath and my mate Justin Langer.

Given that I still have passion and enthusiasm for Astronomy and still enjoy all the behind the scenes administrating I am sure you will understand when I say, it is with somewhat mixed emotions that I wish to officially inform the society that I will not be nominating for President or any committee position for 2007.

The past year and a bit have been a time of great personal change for me as well as my family.

Having left work to seek new challenges, well the challenges actually found me! I now have a new job in the residential and health care industry.

It's a rewarding and satisfying job, however the very nature of the job means that I have very early morning starts and with the differing shifts I do

find that I get chronically tired and need to break up my routines to cope.

In saying this it has become a real struggle to now attend general and committee meetings as well as our field nights. The society deserves its elected representatives to be fully available and engaged, falling asleep in front of guest speakers or whilst driving to the forest is not a good idea.

Also in my thoughts is that after 11 years of service, I wonder if I get long service leave? I really would like to break for a while and be able to have more time to spend on myself as well as my family.

At this point I wish to acknowledge in particular the great support that John Rombi has given me over many years in his capacity as Vice President. The past year has seen John organising the field nights, sending emails and obtaining some great guest speakers for the society. Also there have been many times that John has assisted me, often with a moments notice. This behind the scenes assistance is greatly appreciated.

With John taking up some of my previous duties it has given me the opportunity to attempt some new projects for the society over the last 12 months, namely Space Cadets and Stargard. Despite a couple of good meetings the Cadets would have needed far more time and effort to be successful, unfortunately I underestimated the involvement needed.

I still believe that having a separate meeting to cover basic astronomy and telescope use has merit and would welcome anyone who would like to get something like that up and running.

Stargard carries a lot of passion with me; I am driven by the memory of the views through a 25-inch scope some years back, simply awesome. Down at

Magellan Observatory Zane Hammond has recently acquired a similar telescope to what we hope would one day be our future Stargard telescope. I am sure when our members travel down there for the stay over and take a peek at the heavens similar passions to my own will be aroused.

Stargard is still a work in progress, we have made a good start but there is much to be done. At least obtaining the field for our use was well worth the effort and I always look forward to grabbing my scope and heading off to Stargard when I can.

I am considering maintaining my role on the sportsground management committee as the society's representative, with your approval of course. The society is now an official user of the grounds and recently I needed to report to council about any plans we had for Stargard .

Without any obligations on our part I indicated that a proposed plan was to build an Observatory on that site and seek assistance to build it. The council has modified their planning process so that a period of time until 30/06/08 is covered, almost 18 months from now.

Previously we have thought a storage container on site was the most effective way to go, it may still be, however I believe it's more productive to go with an ambitious plan and then scale it back if needed.

18 months is a long time frame, so it's better to get in now and see what requirements are placed before us. I had a very limited time frame to work with and needed to come up with a project title, for want of any alternative I proposed a working title called the "Stargard Observatory" and I am most happy to progress that idea forward, with the permission of the society and it's management committee of which I would report to directly for any authorizations needed.

A TIME TO WRAP IT UP

I know I have waffled on a bit but I feel it's important to convey some of the why's and wherefores behind my decision, not to do so would be disrespectful to all the great support I have received over many years.

Well I think that's enough, my future reports will not be as consuming as this one, I only have two more issues to go. I think I have penned articles and reports in every issue of Prime Focus since May 1996 and will be looking forward in taking a break from the MAS typing department, after the April issue of course.

Yours truly,
Noel Sharpe
Soon to Be Ex President.

On Guard At Stargard

Bob Bee

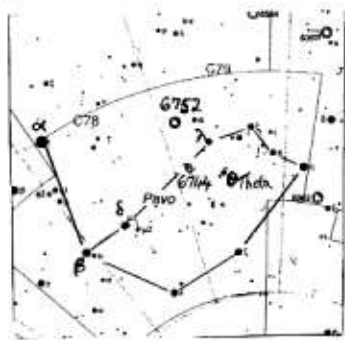
For once the weather was kind and a great sky was on parade at Stargard on Saturday 25th November. A number of stalwarts were lined up on guard with their various telescope types (though I didn't see any reflectors with objective lenses).

Working down the line, there was Martin, myself, Ivan, John R, Paul, Chris and David.

There was a 4 day-old moon to the west and some sky glow to the north and north-east but the sky was still spectacular. For once, I hadn't prepared a specific observation plan because I had a very full day and just wanted to wing it and enjoy the sky. Also, I was road testing John's Wide Scan Type III 16mm 84 degree FoV eye-piece with a view to relieving him of it. I must say that by the end of the night (I left at 1:15am), I was impressed and snapped the eye-piece up - thanks John.

Apart from the usual stable of deep-sky objects I enjoyed (you know - 47 Tuc, M42 in Orion, M31 which was a milky egg shaped glow at best, NGC253) I decided to try for a few less familiar objects.

There is a neat globular cluster in Pavo named NGC6752. It is 6th magnitude and visible in binoculars (which is why it gets a mention in my book.) Its location is as shown in the sketch below.



I decided to have a closer look with my telescope. First I had to locate Pavo which is not one of your more screamingly obvious constellations. It is located midway between Corona Australis and the SCP. This was tricky that night as Corona Australis had just set, but I was able to estimate its position and estimate Pavo's location from there. A bit of searching with my trusty binoculars and - bingo! - there was the glob. Not as big or bright as 47 Tuc, but still an obvious glob. Using a few star patterns in the vicinity I identified with my binoculars, I was able to train the telescope's finder-scope onto it and found the glob in low (x60) mag. I then upped the magnification using John's wide scan eye-piece which gives me x160. What I saw was very attractive.



NGC6752

I liked the small concentrated center and the distinct spindly arms of stars reaching outwards. There is also one bright foreground double star (8th and 9th magnitude) in its outer reaches. This star is also visible in binoculars which made the glob look like it had an appendage.

In Pavo there is also a 9th magnitude spiral galaxy NGC6744, between the cluster of stars at θ Pavonis and 6752 and also on the line between λ and δ Pavonis.

Thankfully the θ group is a distinctive X shape and provides a good marker. (This cluster is also very pretty in binoculars – did I mention that?). The galaxy is supposed to look like the image below.



Unfortunately, try as I did to star hop using the patterns from my Bobroff star map and a lower power eye-piece, and being certain I was on target, I still couldn't 'see' the galaxy. I was puzzled. My telescope is supposedly good for up to 14th magnitude, but I couldn't see this 9th magnitude galaxy. I gave up for the moment.

At this stage, I was drawn by Ivan into a search for the galaxy (also 9th magnitude) NGC247 in Cetus. This is a type of 'sister' galaxy to the better known 7th mag. NGC253 in Sculptor. They are just on opposite sides of the Cetus/Sculptor fence but are only about 1.5 degrees apart. NGC253 is a little ripper. At 9 million light years, its elongated almost edge-on shape resembles a cigar with a bright patch at the center.



NGC253

This is relatively easy to locate (as I have mentioned in a previous article) and, again, it actually visible in binoculars as a distinct elongated hazy patch in the sky.

Unfortunately, as Ivan and I discovered, NGC247 is a slightly different matter. The chart below shows the location of NGC 247 and 253 in relation to β Ceti and α Sculptoris.



You'll note the very helpful marker stars in a form of an isosceles triangle, with another beyond it towards α Scu. These help you find NGC253 very easily. They SHOULD also help you find 247 which is just less than 1 degree short of the first triangle. Search as we both did, Ivan and I could not confidently say we 'nailed' 247. This is generally what it should have looked like, if a little less defined in our eyepieces.



NGC247

At the end of the evening, I finally got what looked like the faintest elongated smudge but with no discernible central concentration. Was it 247 or an optical illusion? Ivan and I both gave it a hard look. Then I used my hand control to move the scope away from center. The smudge moved off center with it, then came back when I reversed the control. Good enough for us. We had NGC247 but it didn't exactly rock my socks.

Again, this is a 9th mag. galaxy and should have appeared brighter (no... I didn't have a moon filter in the eye piece). I can only assume it was an affect of the degree of light pollution that night, from both the setting Moon and the north-east glow. However, am I disappointed? No.

I had a great time searching for it and, ultimately I believe, finding it. (Thanks, Ivan, for the incentive. I hope you enjoyed the chase as well.) This is something I believe people who totally depend on Go-To telescopes miss out on. Sure, they find stacks of objects each night and good luck to them. But they miss out on the fun (yes, and frustration) of finding them.

At that stage it was very late and I was very tired with gritty eyes (it had been a long day). I decided not to go back for another try at NGC5744. I figured that being 9th mag. and face-on, I was less likely to see it than NGC247. I'll leave that for another night at a darker site, perhaps at Belanglo.

Oh What a Night

Lloyd Wright

Hello fellow Astronomers, Well what a weekend we had on the 20th of January 2007, I will never forget that spectacular event. It was the most exciting period of my life,(Please don't tell my wife that please)?

I am absolutely positive that everyone who was there that night felt the same way. When Ned, Bob, Martin and I got there on Friday night, we went up the road a bit to look for an area where the "Comet" would be best seen, we did find a spot just up the road from the Cabin, about a thousand metres or so. The comet looked brilliant from there, however as the comet moved to the south, we lost it a bit behind the trees.



The next day Ned and I went up to the same spot, however Ned said that there seems to be a better area down the road a little, so we went down the same road and saw a "perfect" Horizon on the right. The paddock and Horizon was perfect for viewing the "Comet



Later that night when virtually everyone (well not quite, but it seemed that way?) from the club came down, we all went to that area. Well what happened next was great, a lady by the name of Susan Woodcock came down to us and asked what we were doing, well we said that we were here to look at the comet, well then she said, why don't you all come onto our property and view it from there, we have higher ground where you would see the comet better. Then Susan said watch out for the "Snakes" , great!!!. I think I was looking at the ground for "sliveries" more than I was looking at the comet? Well not quite? Nothing what so ever was going to ruin my views of this comet, (not even snakes)

It was great of Susan to invite us onto her property for this spectacular and unforgettable event, The Macarthur Astronomical Society are putting together a special gift of appreciation for her efforts.

All the best to all..

FOR SALE

Skywatcher 6" refractor f/8
(D=150mm, FL = 1200mm)
Complete with motor drive and EQ4
equatorial mount. Instructions included.
Price: \$1200 o.n.o

Contact MIKHAIL AWIJAN

Ph: 0402085716



Image of similar product
This is not the actual product for Sale

A Grand Night of Viewing

Bob Bee

One has to hand it to John Rombi for organizing such a great first meeting night for the year, on 15th January. For those of you who missed it... suffer (sorry, commiserations).

What started out as an anticipated routine "what did you do over the break" type meeting ended up with people all abuzz from the night's key event. There was no key speaker ... who needed one?

After a few formalities, John suggested we all step outside and hike up the hill behind

the building to see what, if anything, we could observe of the new comet McNaught (C2007 P1), discovered by the Australian astronomer at Siding Spring. It had already made a show for the northern hemisphere and now was our turn as it peeped out from behind its swing around the Sun.

The prospects didn't look good with a thick band of haze from smoke pollution clinging to the horizon directly above the sunset from where we expected the comet to be. It was touted as a very bright comet, around magnitude -6 (compared to Venus' current -3.7), the brightest in the last 40 years, but the clouds were not promising.

Still, everyone looked, naked eye and binocular assisted, in the prescribed direction as the sun set lower and the sky gradually darkened (or should I say grayed?) It got to a time when it was generally agreed the comet was too low and in the crud-band when I started exploring for Venus with my binoculars.

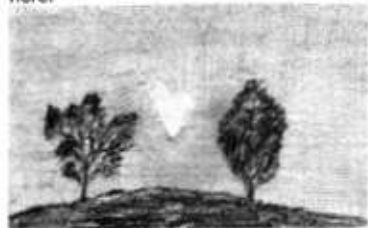
I was told it was somewhat higher than the comet away from the Sun, so I elevated the binoculars and searched. Suddenly I saw what I thought was Venus, well clear of the crud, about 7° above the hilly horizon. But it looked fuzzy and... it had a fan-shaped tail?

"I've got it", I cried out. Understandably, there was a degree of doubt to this pronouncement, but when I pointed out the position in precise astronomical terms: "Halfway down that hilly hump, a smidge to the left of that bigger tree, and straight up about half a field of view above that orange crud", others found it and agreed it was in fact the comet.

That's when the fun really began. Everyone was soon onto the comet, borrowing binoculars if they didn't have any, all agreeing it was quite something. But it soon got better as the sky gradually darkened and the comet's tail

became more distinct. Then it became visible to the naked eye, for some sooner than others. It wasn't gob-smacking spectacular but a real treat to be able to say "I've seen it naked eye." As we watched it, due to its passage through cloud layers of different densities, it appeared to dull, then flare up again.

I personally couldn't see an extended tail, but a very distinct widely fanned short tail. It was getting very low when John called us back to the meeting room. Some of us dallied long enough to see it finally disappear behind the clouds. My final view of it was quite exquisite as, from where I was standing, it appeared to travel down the gap between two trees on the hillside. I've drawn my impression of it here.



Back at the meeting, everyone was sharing their observations. The remainder of the night was occupied with an excellent DVD of the Cassini and Huygens probe. All in all, an excellent start to the year and well worth the increase in membership fees.

But we weren't done. The following night, a number of us decided to return to the hill to see if its visibility had improved as it was supposed to be further separated from the Sun and higher, if a bit fainter. About a dozen of us turned up, the more hearty even lugged telescopes up to the top of the hill. We had a few 'bystanders' who wondered over to see what we were

looking at and we were only too happy to show them.

It was Lou Timpano who saw it first this time, and it was indeed higher than the previous night. Cameras clicked and binoculars were passed around as everyone shared in the developing visual treat. At its climax, when it came fully visible naked eye with a lovely streaming tail (about 3 or 4 degrees) it was a very obvious object in the western sky.



To keep it in perspective, it was obviously not a large comet, but the best we have seen for a very long time. As we all happily packed up to go home after it disappeared into the clouds, we all tried to imagine what it would be like to see a comet like that, high in the sky with a tail blazing halfway across the heavens. No wonder the ancients were awed to the point of human sacrifices.

But to top the evening off, as the comet faded into the cloud banks, the biggest fireball I have ever seen suddenly ripped across the sky from south west to north east. We all stopped in awe. It was like a burning aeroplane in a long death dive, the fireball and tail lasting at least four, maybe five seconds and traveling about 90° of the sky. "Did you see that?", "What a ripper", "Oh my gosh". Did that ever wake us up?

What a great start to the year. What have you got lined up next John?

Appreciation to Bob Bee

Roger Powell

I would like to record in 'Prime Focus' a member's brief appreciation for the tireless work done by the Society's retiring Editor, Bob Bee.

Like many other members, I have long been an admirer of Bob's amazing ability and his willingness to spend so much time providing us with such an excellent publication. It has always been packed with interesting articles and news - much of it eloquently penned by Bob himself - and it has always been on time.

Producing a monthly magazine, with limited time and resources is often a very thankless task but in 'Prime Focus' Bob always demonstrated a wonderful ability with words, both written and spoken.

Besides editing 'Prime Focus' for its entire eleven year existence to December 2006 - and serving as a member of the Executive Committee - Bob has also promoted the science of astronomy with his popular 'Heavens Above' features in the Macarthur Chronicle and his talks to local organisations.

As one who was present at the very first embryonic meeting of MAS, in Phil Ainsworth's garage, I have witnessed, from the backbenches, the founding of the Macarthur Astronomical Society, the initial growth years of Phillip Ainsworth's presidency and the establishment of the Society as a force in the amateur astronomy world under the current presidency of Noel Sharpe. Bob's contribution to the Society via 'Prime Focus' - over the entirety of these two eras - has been colossal, so I want to say well done, Bob. I am sure all members join me in appreciating your work and in wishing you well in your retirement.



MAS Website News

www.macastro.org.au

Make sure you all check out the newly updated Society website. Thanks to Martin for a great effort in creating our new look.

In Brief

- > **Revolutionary Telescope** - It seems a new design of telescope has been released by Australian Geographic. As advertised in a full page newspaper spread of products in November 2006, this 900x130 reflector telescope uses a 130mm "objective lens". Such a revolutionary telescope would appear cheap at only \$499. But then, maybe a 130mm primary mirror is an optional extra?

Prime Focus Article Submission

Deadline for article submissions for the March edition of Prime Focus is

Monday 5th March 2007

All Articles can be submitted via email to cyberplggy@optusnet.com.au
Or via snail mail to the MAS Postal address

Thanks for reading my first edition of Prime Focus and stay tuned for new and exciting features over the coming months.