



PRIME FOCUS

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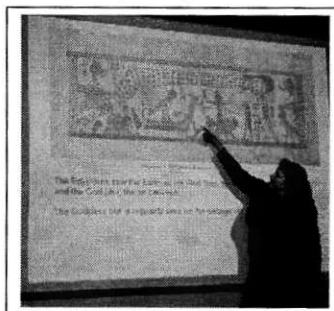
Presidents Report

John Rombi

Welcome everyone to what I know is going to be a great evening. We will deviate from the usual guest speaker and go with a Workshop.

This will include you the telescope user and the theme is "Drift Alignment", Martin and I have noticed at our observing nights the struggles that quite a few of you have using the humble equatorial mount (I must say I would if I had one). I would like to thank Martin for making himself available for this important lesson.

I would like to thank Melissa Hulbert for her spellbinding presentation on Egyptology and its gods, especially the ones relating to astronomy.



I'm an Egyptologist from way back and found it very interesting, I hope you did. Melissa has accepted an invitation to return next year. Speaking of Melissa, I must let you all in on an embarrassing moment for me at the last monthly meeting, it was my first night as president and I was very nervous. After making sure that everything was ok (I did leave half the things I was suppose to bring at home)

MAS Committee

President

John Rombi

Vice President

Martin Ferlito

Secretary

Bob Bee

Treasurer

Dick Everett

Committee Members

Lloyd Wright

Kate Johnston

Daniel Ross

MAS Postal Address

P.O. Box 17
MINTO NSW 2566

Ph: (02) 4647 4335

Web: www.macastro.org.au

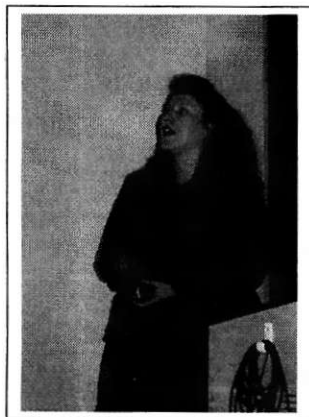
Prime Focus Editor

Kate Johnston

cyberpiggy@optusnet.com.au

I went to grab everyone's attention to begin the meeting, without thinking I picked up the first article at hand and began bashing the desk with it. As I looked around for everyone's attention I saw a pained look on Melissa's face, I had picked up her Infrared mouse and was using it as my gavel, boy was my name mud!!! I did apologise later and again in an email to her the next day, I'm glad she doesn't hold grudges.

Ahhhh.....the fun of office!!



Stargard

As I type this report, it's pouring rain outside and our night at Stargard has been cancelled. I hope we had a better night at The Forest.

The Domes

On Friday May 25th in conjunction with The Rotary Observatory we held an Open Night for the public; due to an illness in Ragbir Bhatal's (Observatory Director) family the domes were not open.

I would like to thank the members that were available; the 50-60 members of the public that attended were treated to the stupendous sights of Venus, Saturn, The Moon, Jupiter and a host of deep sky objects. We finished up at 10.00pm with a very sated group of beginner astronomers

OBSERVING DATES

7/07/07 Stargard
14/07/07 The Forest
16/07/07 General Meeting MAS
Workshop
4/08/07 TBA
11/08/07 The Forest
20/08/07 General Meeting

Noel Sharpe

I would like to thank Noel for taking up the post of Liaison on behalf on M.A.S. with the management committee of the property that we call Stargard. Noel will attend these meetings and report back to our committee on any matters of importance, Thanks Noel!!
You can't keep a good man down!!

Finally

Please make use of our website; Martin has made sure that it's chockfull of all the good things. If you need to contact any committee member or me, please check in the members section where you will find the appropriate information.

Clear Skies,

Carina – It's In Your Stars

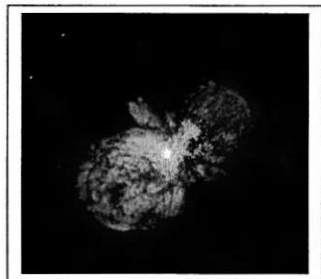
Bob Bee

What with amazing astronomical discoveries being made regularly these days, astronomers are becoming harder to impress. But this explosion has done it. In the constellation Perseus, in a galaxy 240 million light years away, a rare star believed to be 150 times more massive than our Sun blew itself completely to smithereens without first contracting and leaving a black hole behind, as theory says it should. Over 100 times brighter than a normal supernova for such large stars, it appears to be a completely new type of supernova. It also may be the biggest stellar explosion ever observed by astronomers.

What makes it even more interesting to us is that the star that blew up was very similar to a star only 7,500 light years from Earth – Eta Carinae. Astronomers have long been aware that Eta Carinae has a mass of about 120 Suns and is a candidate to go supernovae. This new supernova mechanism suggests it might go sooner than they thought. And when it does, compared to the one in Perseus, we are virtually in Eta Carinae's backyard. It should provide the greatest sky spectacle ever seen by mankind.

Now consider that SN1987a was first seen naked eye at about mag.+2.9. That LMC star was probably much smaller than Eta Carinae, and the Large Magellanic Cloud in which it resided is about 200,000 light years away (that is, about 30 times the distance to Eta Carinae). So, it is conceivable that when Eta Carinae blows, if it takes the same strange mechanism as this star in Perseus (100 time brighter than a normal supernova = 5 mags.) and allowing for the increase in brightness due to proximity ($30^2 = 900$ times brighter = 7.5 mag), that supernova could shine in our skies at about $2.9 - 7.5 - 5 = -9.6$ mag., give or take a magnitude. As the Moon shines at -11 magnitude, -9 or -10 mag. is a seriously bright star.

Now that would be fun to see.



Astrology (Yes that's right) Vs Astronomy

Lloyd Wright

Well what can I say about Astrology, mmmmmm not much? Where do I start?

Well, over the last year or two when I've gone to bed every night, I switched on the radio, and (accidentally) was listening to this woman asking this so called Astrologer (Re Psychic) woman on the radio station about what was going to happen to her in the future.

So I was waiting with bated breath to hear what she was going to say, mmmmm well the woman from the radio said..lets see hear mmmmm, Jupiter is in your Astrological sign very soon, You're Libra that means your a number 8, add 4 and you're a 12 divide that into 60 you get 5 you see, that's what they all say? Derrrr maybe I'm stupid? (Don't ask me how she came to that conclusion please?) Saturn will be catching up to Uranus soon, and Pluto's having pups? (a little humour there folks?) which means that you are very keen, and a loving, caring, person. Well the woman who asked the question was amazed, that's right I am a loving, caring person, that's amazing how you know that?.

Then she said well you're going to have a great and healthy life, meet new friends, things are going to be fantastic for the rest of your life (That's what I wanted to hear). The woman said thankyou very,very,very,much, bye bye...A very happy customer in deed...

...I keep my mind open on virtually every subject known to man and woman, however I cannot (unless someone can convince me otherwise) believe how a planet, or planets," billions" of kilometers away can determine how people live from day to day on earth, and secondly how an "Astrologer" knows what is going to happen to you. I was listening to an Astronomer from the "Seti" institute he said that he went to New York one day and bought 3 different news papers, he went to the astrology section of each paper to find out if his star sign was different in content from one to the other, well, well, surprise, surprise. I'll leave that to you to figure out ok. By the way if you want to talk to an astrologer it will cost you about \$6.00 per minute?.. you wouldn't want to be on hold for to long would you.

All the best...The "Astronomer" and proud of it.

Ps..My star sign is Sagittarius? oops...Lloyd....

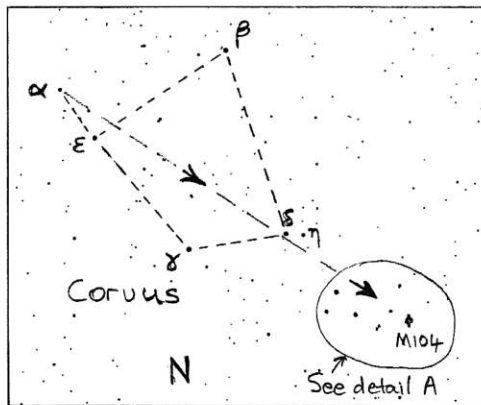
Finding M104 – The Sombrero Galaxy

Bob Bee

It used to frustrate me that at our dark sites, other members were able to find the Sombrero Galaxy (M104) at the drop of a hat. For some reason, I had to struggle to find it. Then, the other night, I did my homework and discovered there is a very simple way to find it with an easy to remember star-hop technique. This is for others out there like me who needed this little bit of help. Now, when M104 is up, I can go out and find it in less than 30 seconds. You can too.

M104 is on the border of the constellations Corvus and Virgo. It is that famous galaxy 35 million light years away. My star-hop method is based on the stars in Corvus. The center of the Corvus asterism is only 17° west of the star Spica, in Virgo.

If you look at the chart below, with North at the bottom, you will see that if you extended the line from α Corvi to δ Corvi by 5.5° (a tad over $\frac{1}{2}$ the α to δ distance) it will land right on M104.

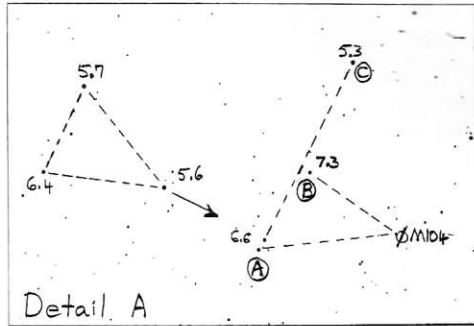


Now that's easy enough to say, but it can be tricky judging angles of displacement in a finder scope. There is help at hand, though.

In the chart above, I have circled an area near M104 a few degrees from δ Corvi.

You will see a triangle of stars pointing towards M104, with a line of three stars (one is actually a double) between the triangle and M104.

This area is blown up in the Detail A shown in the next sketch. This should correspond roughly to the view in your finder scope as you pan north-east from δ Corvi.



You can see from this Detail A that the triangle of stars (of magnitudes 5.6 through to 6.4) point conveniently to the mag. 6.6 double star which I have labeled 'A'. In the finder scope you will easily see star 'C' at mag 5.3. In between 'A' and 'C' there is the much fainter mag 7.3 star 'B', only just visible in your finder scope.

Now, just using your eye, mentally form a right angled triangle with AB the base, the right angle being at 'B'. The distance from 'B' to M104 is 52', just under one degree. If you put the center of your finderscope in roughly that position, then your telescope eyepiece, at your lowest magnification, should show M104. You can then center M104 and pump up your magnification. A grand sight.

M104

Now that may sound a bit complicated, but it is really very straight forward once you have done it.

In a nutshell:

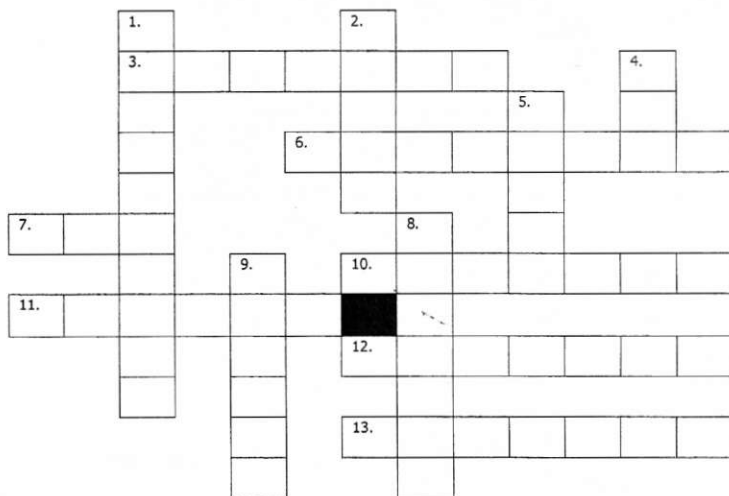
- locate Corvus in sky;
- identify delta δ Corvi and place in finder scope;
- move slowly down and east with finder scope to find the triangle and three stars in straight line;
- Form the right angled triangle with A and B;
- Put center of finder scope where you estimate M104 to be;
- Check in main eyepiece and center on M104.



Then you will be able to do it over and over without any song or hat dance.

Crossword No2

Ivan Fox



Across

3. Comet seen approx every 70 years [7]
6. NGC 4755 [8]
7. Light Sensitive Electronic Detector [3]
10. Australis and Borealis [7]
11. Herschel first detected it in 1781 [6]
12. M11 [7]
13. Caloris Basin is located here [7]

Down

1. Keppler saw one explode [10]
2. Delta star in Canis Major [5]
4. Seventeenth Brightest Star in a Constellation [3]
5. Clyde Tombaugh's discovery in 1930 [5]
8. Largest Planet in our solar system [7]
9. American Astronomer who discovered that the universe is expanding [6]

Total Eclipse of the Moon

Tuesday August 28th 2007

Approx Viewing Times for Sydney:

6:51pm	Moon moving into Earth's Shadow
7:52pm	Totality Commences – Moon is completely within Earth's Shadow
9:23pm	Moon starts to move out of Earth's Shadow
10:24pm	Eclipse Finishes

Magnitude DVD's back in Stock

The second run of MAS Magnitude DVD's are now available.

DVD's are \$10 each.

For Purchasing details see the MAS website or contact Martin Ferlito.

MAS Website

www.macastro.org.au

MAY CROSSWORD SOLUTION

Across

- | | |
|--------------|--------------|
| 2. Greenwich | 6. Galaxy |
| 8. Ara | 9. Eros |
| 11. Magellan | 13. Asterism |
| 15. Aries | 16. Seti |
| 17. Cygnus | |

Down

- | | |
|-------------|-----------------|
| 1. Coma | 3. Images |
| 4. Hyperion | 5. Catadioptric |
| 7. Yoke | 10. Beta |
| 11. Mira | 12. Albedo |
| 14. Mars | |

Prime Focus Article Submission

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

Monday 9th July 2007

All Articles can be submitted via email to

cyberpiggy@optusnet.com.au

Or via snail mail to the MAS Postal address

Thanks to all the contributors for this month.....