



## Inside this Issue

Observing Dates	2
For Sale	2
Roll Up, Roll Up	3
Star Hopping to Messiers	4
Out with the Old	8

## Presidents Report

John Rombi

Good Evening to all members and guests; and welcome to our April meeting and A.G.M. Tonight we will be saying farewell to our old committee and inducting our new committee to take M.A.S into the New Year.

Further details on the past happenings are available in my yearly report.

I would like to thank last months speaker Dr Miroslav Filipovic from U.W.S for a very thought provoking and sometimes controversial talk on "The Universes beginning, makeup and ultimate size" He certainly had the joint hopping!!

Our Stargard and Forest nights have been mixed regarding the weather. When the sky was clear, the dew was oppressive. Well we are heading to the colder & drier time of the year; can't wait!!

### Tonight

Kate & Daniel Ross will take us on a "Tour of Astronomy, U.K Style"

### Next Month

Don't forget; tell your friends, work colleagues even your enemies that Prof Bryan Gaensler will be our speaker for May.

### Open night- Rotary Observatory.

There will be an Open Night for the public held on Saturday June 14<sup>th</sup> at The Domes.

## MAS Committee

### President

John Rombi

### 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.macaastro.org.au](http://www.macaastro.org.au)

### Prime Focus Editor

Kate Johnston

[cyberpiggy@optusnet.com.au](mailto:cyberpiggy@optusnet.com.au)

This will be our first open night for the year, so.....I need volunteers to man the scopes as usual.

I have a special job for a special person. I need a member to man our "Information Desk" Apart from information about M.A.S, you will be required to sell our raffle tickets and DVDs. Please contact me, if you can help in any way.

### Campbelltown Show

I would like to thank ALL the members that manned our stand. Without your involvement it would not have been the success it was.

Clear Skies, John Rombi.

## **MAS Guessing Competition**

All members are encouraged to take a book of tickets home with them tonight to sell.

Prizes include 8" Celestron Telescope, Meade Binoculars and a signed Fred Watson book.

**Ticket prices are \$5 each or 3 for \$10**

The Competition will be drawn on July 21<sup>st</sup> 2008.

Please return tickets and money to Kate Johnston or a committee member.

## **FOR SALE**

Meade - Computer Guided Telescope  
Model DS - 2114 ATS

114 mm Aperture: Focal Length 1000mm f / 8.8 Calculated  
optical powers 40 x to 111 x  
Eyepiece diameter 1.25 "

Maximum recommended magnification  
under good observing condition 325x

It was \$ 700.00 Will sell for \$ 400.00

Contact: Ursula Braatz

Tel.: 9601- 4196 or email: ubraatz@dodo.com.au

## **Observing Dates**

### April

**26/04/08** Stargard

### May

**3/05/08** The Forest

**19/05/08** General Meeting

**31/05/08** Stargard

### June

**7/06/08** The Forest

**16/06/08** General Meeting

**28/06/08** Stargard

### July

**5/07/08** The Forest

**21/07/08** General Meeting

**26/07/08** Stargard

### August

**2/08/08** The Forest

**18/08/08** General Meeting

**23/08/08** Stargard

**30/08/08** The Forest

### September

**15/09/08** General Meeting

**20/09/08** Stargard

**27/09/08** The Forest

### October

**20/10/08** General Meeting

**25/10/08** Stargard

### November

**1/11/08** The Forest

**17/11/08** General Meeting

**29/11/08** Stargard

### December

**20/12/08** Stargard

**27/12/08** The Forest

TBA - Xmas Party

## Roll up to the Campbelltown Show

Bob Bee and Dick Everett

MAS's profile in the Campbelltown area has been boosted by our successful display at the recent Campbelltown Show over 4<sup>th</sup> – 6<sup>th</sup> April. The display contained a variety of informative and entertaining features, providing passer-bys with an insight into the world of amateur astronomy and, indeed, the Universe itself.

Against the backdrop of a 'black starry night' and our new society banner, there was a box (nicknamed the 'coffin') supplied by BinTel which had six telescope eyepieces providing views of the Moon, Saturn, a comet and various deep space objects. This was a favourite of the crowd. There was also a display of astro-photos taken by MAS members and also by Hubble telescope etc which were the focus of many discussions. MacDob was a popular talking point which led into sales of our guessing competition tickets.

The DVD projection of the MAS astro-images and also the Cassini mission (as well as a 3D model of the probe constructed by Dick) led a dynamic appeal to the display. People were able to see their star sign as it appears in the sky on another laptop screen. This often led into a discussion on the variety of constellations in the sky and the way the sky changes over the year.



But the best feature of our display was the enthusiastic representation by the MAS volunteers each day. Every member of the public who stopped at the stall were engaged in friendly and welcoming conversation, giving information about who MAS was and what we do, as well as general information about astronomy and the universe.

Dick and I would like to acknowledge the efforts of everyone who helped at the stall. To you – Graeme Bellamy, Ian Cook, George Cruikshank, Stewart Grainger, David Greenwood, Christiane Gurney, Tony Law, Bob Monkomb, Kate and Daniel Ross, Henry Swierk, Debra Taylor, Lloyd Wright, – a hearty

**WELL DONE and THANKS!** on behalf of all the members of MAS.

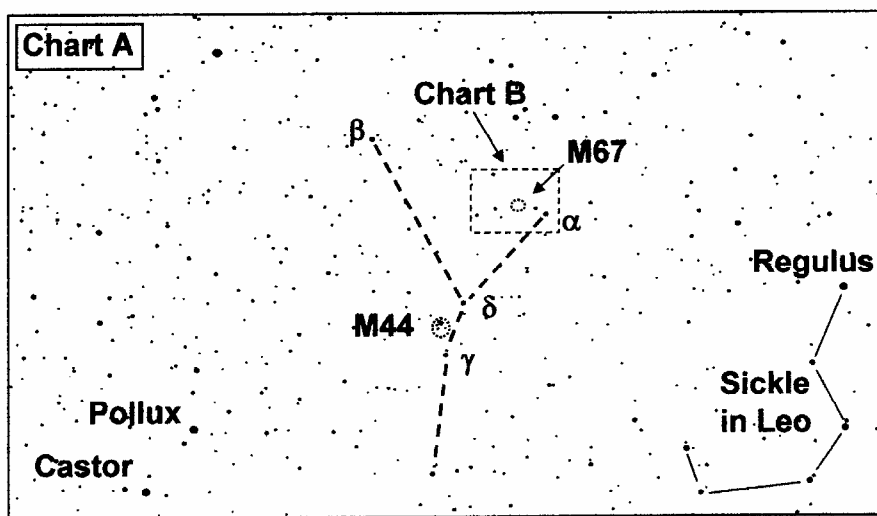
## Star Hopping to Messiers #3 – Cancer and Leo

Bob Bee

In April, Cancer and Leo are low to the north. The two Messiers in Cancer are pretty easy to find and need minimal directions.

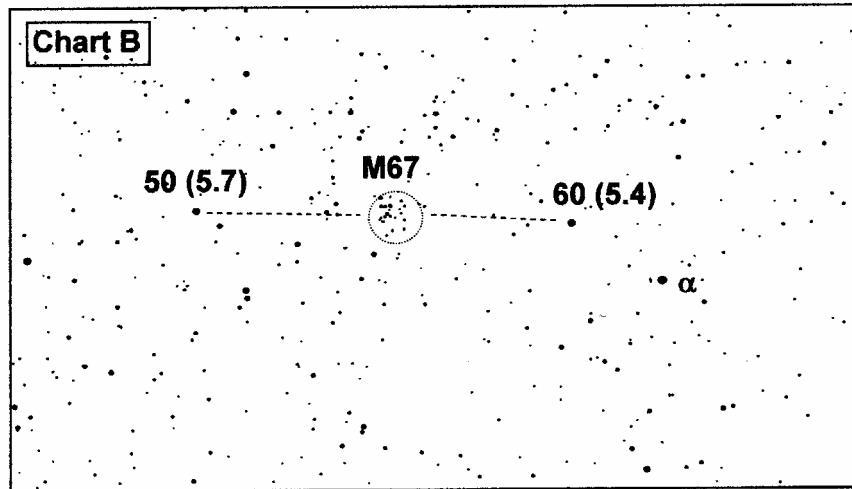
### Cancer – M44 and M67.

First find the constellation Cancer. Its stars are faint with magnitudes from 3 to 4. It is best found approx. midway between the twins Pollux and Castor (in Gemini) and the sickle in Leo. See Chart A.



Identify the two stars in the middle of Cancer,  $\delta$  and  $\gamma$ . They are about  $3.3^\circ$  apart. **M44** is very easily located just east of the line between  $\delta$  and  $\gamma$ . M44 is a large loose open cluster of about 50 stars, known as the Beehive, or Praesepe (the Manger). It is easily visible and best viewed in binoculars.

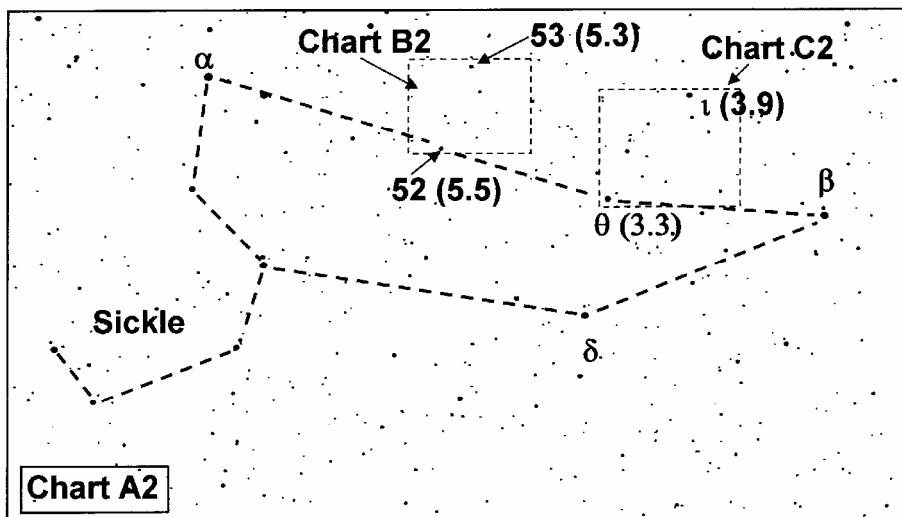
**Now to find M67.** Using Chart A, locate  $\alpha$  Cancri. Get that star in your finder-scope. Now refer to Chart B. (This should be all very easy as M67 is visible as a misty patch in binoculars in a dark sky.)



Put  $\alpha$  at the right of the FoV. In the same FoV you'll see two 5<sup>th</sup> mag stars to its left, 50 and 60 Cancri, about  $2.25^\circ$  apart. Right in the middle you will see a fairly dense open cluster about  $20'$  across. That's **M67**, with about 200 10<sup>th</sup> mag stars 2,500 l.y. away.

### Leo – M65 & 66, M95, 96 & 105

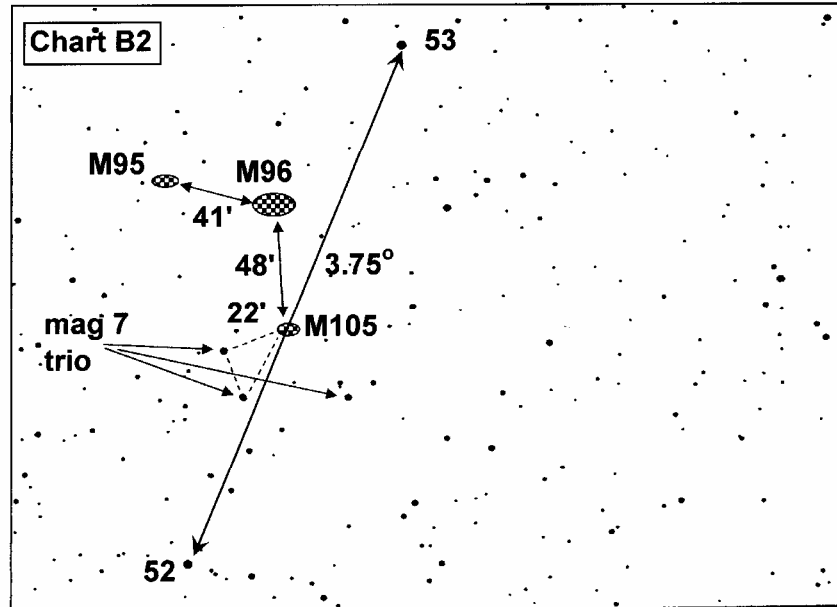
The Messiers in Leo (which will not be visible in your finder scope) are a bit more of a challenge but very exciting to find – they are all galaxies. First locate Leo in the sky by identifying the Sickle with Regulus ( $\alpha$  Leonis) at the top. See Chart A2 below.



Search along the lion's belly for the 3.3 mag. star  $\theta$  Leonis,  $16.5^\circ$  east of Regulus. Almost half-way along the straight line between Regulus and  $\theta$ , you will find a mag. 5.5 star 52 Leonis. It is barely naked eye visible but stands out in binoculars and your finder scope. When you locate 52,  $3.75^\circ$  above it is another 5.3 mag.

star, 53 Leonis. 52 and 53 should both be in the same finder scope FoV. Happily M95, M96 & M105 all lay between these two stars. That's the hunting ground.

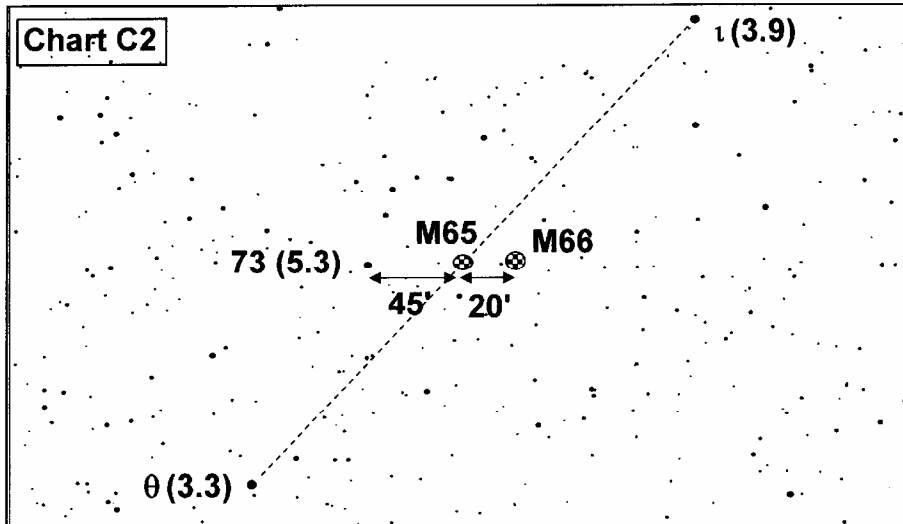
Now refer to Chart B2 below to find Ms 95, 96 and 105. (Remember your finder scope will show this up-side-down.)



Place 52 Leonis at one edge of your finder scope FoV with 53 near the other side. As **M105** is  $1^{\circ} 38'$  from 52 along the line to 53, if you place the centre of your FoV approx. midway between 52 and 53 Leonis, you should see M105 near centre in your scope's main eye-piece. Another way is to locate in your finder scope the 'trio' of 7<sup>th</sup> mag. stars straddling the 52-53 line. If you make an isosceles triangle from the two closest (as on the Chart B2), M105 is on the 3<sup>rd</sup> triangle point. It's only 22' away from the nearest trio star. M105 is a nice 9<sup>th</sup> mag. elliptical galaxy.

To find **M95** and **M96**, you can either continue from M105 or start from 53 Leonis. The trick is knowing that M96 is only 48' from M105 and M95 and M96 are only 41' apart. If you have found M105, move 48' away from the trio stars as shown and check your eye-piece. You should see **M96**, a 9<sup>th</sup> mag. spiral galaxy. Alternatively, locate 53 Leonis again in your finder scope and move towards 52 Leonis about 1/3<sup>rd</sup> the way. Then move across about 20'. This should put you very close to M96 and visible in your eye-piece. Then continue on the same line 41' and find M95, a 10<sup>th</sup> mag. spiral.

Now let's find **M65** and **M66**. There are a couple of happy star-hopping coincidences for these two and they are relatively easy to locate. Look at Chart 2C below (again, remember you will see this inverted in your finder scope so reverse your directions).



The two key stars to find first are  $\theta$  (mag 3.3) and  $\iota$  (mag. 3.9) Leonis. These probably won't fit into your finder scope FoV together, but it will be very close. The happy facts are that  $\theta$  and  $\iota$  are  $5.5^\circ$  apart, **M65** lies exactly on the line between them and is  $2.6^\circ$  up from  $\theta$ , which is very close to half-way to  $\iota$ . If you place the centre of your finder-scope on the half-way point, you'll most certainly have M65 in your scope's low power eye-piece. And as **M66 is only 20' from M65**, you should also have it. Just to be sure, in your finder scope you should see a mag. 5.3 star 73 Leonis, to the west of M65's 'mid-way' spot. Now 73 Leonis is 45' from M65. As you can see from Chart 2C, 73, M65 and M66 form a straight line, so put your finder scope's centre on the opposite side of M65 at half the length M65 is from 73 Leo. It should land on M66. Ideally, in a low power eye piece, you should see both M65 and M66 together.



**M65 and M66 and both 9<sup>th</sup> mag. spiral galaxies.**

That's a lot of words to explain what should be a relatively easy search.  
Go get 'em tiger... er, Leo.

## **Out with the Old, In with the New**

Bob Bee

It's with a certain amount of nostalgia that I drop out of the MAS committee this AGM. It's been fun over the past 12 years to help shape the club but, as the walrus said, the time has come...

But this article is not about me... it's about you.

Firstly let us thank the outgoing committee and executive for their dedication to the Society over the past year and indeed, previous years. I've had the privilege of working with three different President's and various Secretaries and Treasurers in my time and this Society owes them heaps.

Secondly, congratulations to the incoming committee and executive, in particular the new members on committee who I believe will bring fresh ideas and energy to the role. My advice to them – don't be afraid to speak your mind. You're not just there to keep the chair warm and enjoy the supper.

And finally, may I encourage every member of MAS to give serious consideration to putting your hand up to spend time on the Management Committee at some future year. Don't just leave it to the few. Take it from me; it is a very rewarding activity – why do you think it took so long for me to finally pull up my tent?

Thanks for the memories – now full speed ahead for the new Committee, and may we give them our whole-hearted support when they ask for it. Remember – they are doing it all for us.

### **2007-2008 MAS Committee**

