



SCORPIUS

THE JOURNAL OF THE
MORNINGTON PENINSULA ASTRONOMICAL SOCIETY INC.

Volume XVI, No. 4 (November/December 2007)

The Mornington Peninsula Astronomical Society (formerly the Astronomical Society of Frankston) was founded in 1969 with the aim of fostering the study and understanding of Astronomy by amateurs and promoting the hobby of amateur Astronomy to the general community at all levels.

The Society holds a focused general meeting each month for the exchange of ideas and information. Regular public and private observing nights are arranged to observe currently available celestial objects and phenomena. In addition, the society encourages the services of its members for educational presentations and observing nights for schools and community groups.

Blazing trails for 2007

With the Christmas break and end of year approaching, 2007 will be best remembered for McNaught's Comet in the mid January sky. This comet, first discovered by an Australian amateur astronomer Rob McNaught, brought local amateur astronomy back into the headlines, as we all took a moment to look and marvelled at the show it put on for us.

While Comet McNaught caught our imagination, other events this year (including Bendigo's successful hosting of VASTROC '07, the total lunar eclipse in late August, and the 50th anniversary of space flight) all ensured 2007 would have a bit of everything - for everyone. The pictures here showcase just a bit of what M.P.A.S. members did/saw in 2007.

So with 2007 coming to a close, thank you for your support of the Society this year. We look forward (and upwards) to see what 2008 holds. From everyone on the committee, may we wish you all a Merry Christmas and a very Happy New Year.



Charles Messier's visit to VASTROC in Bendigo. Photo: Kevin Rossiter.



Solar Day at the Briars back in February. Photo: John Cleverdon.



The Total Lunar Eclipse in late August, imaged by Steve Mohr.

McNaughts Comet in the January sky, photographed by Greg Walton.

Also in **SCORPIUS** for November & December...

- Upcoming Events
- An Astronomical Holiday
- President's Report
- Skywatch for November & December

Society News

Upcoming Society Events for November & December

November

- Fri 2nd - Public Viewing Night at The Briars (8pm)***
Sat 10th - Members Viewing Night at The Briars
including Ice In Space members
Sat 17th - Double Helix Viewing Night at The Briars (8pm)*
(Details below)
Wed 21st - Annual General Meeting at The Peninsula School (8pm)
Session 1 - Election of Office Bearers
Session 2 - Speaker TBA - 'Something'
Session 3 - Open Forum & 'Sky for the Month'
Wed 26th - Committee Meeting

December

- Fri 7th - Public Viewing Night at The Briars (8pm)***
Sat 8th - Christmas B.B.Q. Night at The Briars
(Details below)
Sat 15th - Members Viewing Night at The Briars
Note: There is no General Meeting for December

* Denotes assistance in the form of telescopes and general evening operating assistance (i.e. - parking, answering queries, organising supper, etc.) for the public/school nights would be appreciated.

Christmas B.B.Q. Viewing Night



Our final social get together for the year is the Christmas BBQ & Observing night on **Saturday 8th of December**. With the weather starting to warm up, this is a great chance to catch up with everyone before the Christmas/New Year break.

As per last time, this is open to all members and their families, at anytime after 3pm on Saturday. A sausage sizzle will be put on for members with soft drink available for \$1 a can, however you can B.Y.O. other meats and drinks, if you like.

Ho, Ho, Ho, Hope to see you there.

CSIRO's Double Helix Science Club Viewing Night



We have a very special viewing night for the CSIRO's Double Helix Club members on **Saturday 17th November** at The Briars. This is the first time they've arranged an evening with us, and this evening is the night before the Leonids meteor shower peak. We are anticipating a capacity crowd of 100+ as it will have been advertised in the Helix magazine that is sent throughout Australia by CSIRO. They may even run something on the Leonids that issue.

All members are most eagerly encouraged to bring their binoculars, telescopes (no matter how humble or huge) and selves to this evening, no matter what your experience level. Attendees from the Double Helix Science Club will be kids of all ages and likely their families as well. Please note it down now in your diaries, and do come regardless of the weather.

The CSIRO's Double Helix Science Club is aimed for kids from about 7 years old and upwards to have fun exploring science. This is done by promoting science through their publications **Scientrific** (7+), and **The Helix** (10+), events such as this viewing night, and holiday programs. More information about the Double Helix club can be found in the flyer within this newsletter, or find out more at:

<http://www.csiro.au/services/DoubleHelixClub.html>

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Society News

2007 President's Report.

The 2007 year has been a great year for the society. From a committee viewpoint our main objective was to utilise the Briars site as much as possible and get it established as a principle society resource. The year got off to a great start with one of the best comets to grace our skies Comet McNaught just in time for our summer observing program. Since then we have had regular viewing events and BBQ's. We even purchased a better BBQ. The activities at the Briars have been steadily increasing and members are becoming aware of the facilities.

In addition to the public and members viewing nights we have held BBQ viewing nights inviting the A.S.V., Ice In Space, field naturalists and the Peninsula camera club. Overall the Briars Astronomy Centre is becoming well known to the public and local community. The plan is to maintain a high level of diverse activities for both members and the public. I would like to thank all those members who have helped out at these events, in particular Greg Walton who has been keeping the observing side of things going and Richard Pollard for his public video presentations that seem to just get better and better. These events depend upon a willing team of volunteer members who commit time and effort to making them a success.

The General Meetings have been a bit of a disappointment this year with attendances slowly falling during the winter months. We have tried under Ian Sullivan's expert guidance to maintain a diverse speaker program and have had some excellent lectures this year. We are not sure why attendances have been falling and the committee are seeking to reverse this decline.

Our public out-reach activities continue to raise our profile and we have seen a rise in school viewing nights, astronomy classes and exhibitions. We tried a small National Science Week exhibition at the Frankston shopping centre which went over very well. Unfortunately we couldn't back it up with good observing weather. Oh well better luck next year.



A members viewing night earlier this year

Image: John Cleverdon

Two significant events this year was the launch of a new upgraded society website with a lot more interactivity and the conversion of the society newsletter to colour. Steve Mohr is still developing the new website and is looking for ideas and content. Brett seems to have bedded in the new society newsletter format and is also looking for content. In addition to the newsletter Brett has updated our information

pamphlets and poster. Congratulations guys a great effort.

I would like to thank all the committee members and volunteers who gave untiring efforts in personal time and contributions to progress the society this year. We have made excellent progress. It has been a most gratifying year and a lot of fun and I hope we can continue in 2008 to make things better and more enjoyable.

Peter Lowe

M.P.A.S President.



The Committee and Society welcome the following new members.
Wishing you clear skies.

Geoff Carstairs

Tony May

Walters Family:

Dean, Kirsten, Kellie, Demi

Therese O'Dea

Quinert Family:

Derryn, Toni, Shaylee, Jamie



Society News

Annual General Meeting - Committee Elections Wednesday, 21st of November, 2007.

Have you considered joining the society committee?

The Mornington Peninsula Astronomical Society operates because we have a committee of management responsible for the general operation of the society. We're always on the look out for interested persons who can contribute to the society's success.

The Society's committee is structured under the constitution and has a number of specific officer positions together with a number of general committee members. Each committee member takes responsibility for handling some aspect of the society's business. The President and Vice President are responsible for the general planning and operation of the Society's business and represent the society to the members, other societies and the general public. The Secretary is the formal contact point of all formal society business and maintains the records of the society. The Treasurer monitors the society financial status and handles the various money transactions required.

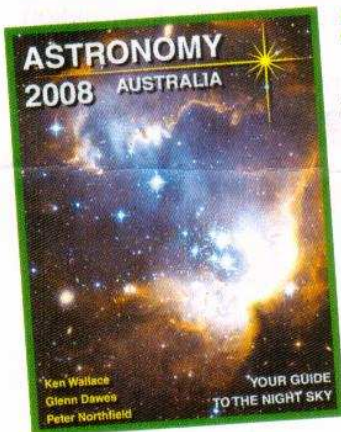
Other committee members provide logistical support for the various society activities & development programs. These include :

- Developing the forward society calendar of activities including speakers for the general meetings and special events both social and astronomical.
- Handling and planning school viewing nights
- Preparing the "What's On" handouts for members.
- Publishing the Scorpius and managing the E-Scorpius internet chat room.
- Maintaining the publicity and public notices we require to keep the general public apprised of our activities.
- Developing and creating the library.

Without this group of dedicated supporters the society would definitely slow down.

If you feel you would like to get involved in the society business or have a particular skill you think would be useful to the society as a whole please give some thought to becoming a committee member.

The Annual General Meeting will be held on **Wednesday, 21st of November, 2007**. In this edition of Scorpius (on page 11), there is a 'Committee Election Form' that can be used for the submission of nominations for the next committee. This can be posted to M.P.A.S., PO Box 564, Frankston, VIC. 3199. Alternatively, nominations can also be submitted electronically to welcome@mpas.asn.au by stating which position on the committee you would like to nominate for.



2008 ASTRONOMY AUSTRALIA

For astronomers, it's that time again to look forward and see what is in store for 2008. Once more, the society will be fortunate enough to secure your guide to the astronomical year ahead with the **2008 ASTRONOMY AUSTRALIA**.

This practical guide to all things astronomical in the Australian skies is a wonderful reference for all levels of star-gazers, from newcomer to expert. Pricing is **\$24** to the public, though society members can get it at the discounted rate of **\$20**.

Society members can get a further discount by renewing their 2008 Society membership before the March General Meeting (15/3/2008), entitling them to a further \$4 discount. This makes **2008 ASTRONOMY AUSTRALIA** only **\$16**

Orders and payments can be made in person at any MPAS gathering, by cheque to P.O. Box 596, Frankston 3199, or by phone by leaving a message on 0419 253 252.

These sky almanacs will be available at any society gathering, from mid-November onwards.

Hurry. The society only orders in a specific quantity each year, and it's first come, first served.



Missing Scorpius?

Some members have missed getting their bi-monthly fix of Scorpius in the mail. If you are one of them (or know someone who is), please email us at scorpius@mpas.asn.au to let us know, and correctly put you on the address list. Copies of Scorpius will also be available at the Briar's All Weather Astronomy Facility, and at the General Meetings.

Society News

Society memberships for 2008

This is a reminder that memberships fees for 2008 are just around the corner. Like last year, we are trying to streamline the membership payment process, with membership payments due in January of each year. If you are not sure if your membership is due as you may have joined in the middle of the year or if you have any other membership enquiries you can contact me (Marty Rudd) on 5977 8863.

Fortunately we have been able to keep the 2008 membership fees at this year's prices. These are:

Full Member	\$50	Family	\$65
Pensioner	\$45	Family Pensioner	\$60
Newsletter Only	\$22		

Also, as mentioned on the previous page, all memberships paid by the March General Meeting (Wednesday 15/3/2008) entitle these members to a further \$4 discount off the members price of **2008 ASTRONOMY AUSTRALIA**, making this publication available for only **\$16**. So ensure you're paid up early to get the most out of your 2008 membership.

And if your wondering why we mention this now? For those of us that don't like paying bills after christmas (matter of fact, who does?) a society membership makes a great year long gift (Just a suggestion!).

And a reminder, due to banks security and apparently another company somewhere in Australia having an abbreviated name 'similar' to M.P.A.S, abbreviations are not allowed on cheques made out to the society. It must state "**Mornington Peninsula Astronomical Society Inc.**". Sorry for any inconvenience that this imposes.

Volunteers Required

With Summer almost upon us, our public viewing night activities will increase over the Christmas / New Year holiday break and we will need extra help from volunteers to see us through this period. Along with other activities (such as newsletter contributions and general meeting speakers) any assistance you can give over this period would be greatly appreciated. Please remember, although members pay a membership fee, this fee is kept low through the contributions from our volunteers. If you have time to help out please approach one of the committee members. And a big THANK YOU to everyone that has helped out in 2007.

N.A.C.A.A. 2008



Coming around the corner again is the biennial NACAA conference. It has actually been 18 months since our society hosted the successful 2006 NACAA conference, which among other presentations and workshops, showcased our society to other amateur astronomers from around the country.

This conference has been held biennially going back to the 1960s. Traditionally, different societies from all over Australia have taken turns at hosting NACAA. In 2008 it is being held over the Easter weekend (Fri 21/3 to Mon 24/3), at the Penrith Panthers Convention Centre, in the western suburbs of Sydney, NSW.

The majority of presentations at such events are by amateurs and generally reflects their interests or work. These talks cover many facets of astronomy and include the needs of beginners up to areas where the amateur can contribute to professional work. There will also be at least a couple of key note presentations by professional astronomers.

Other activities will be various workshops which are put on by fellow astronomers, and plenty of opportunities to socialize, including the convention dinner. At this dinner a representative of the ASA (Astronomical Society of Australia) normally presents the Berenice Page Medal for Amateur contributions to astronomy. The list of past recipients is really a who's who of prominent Australian amateurs – many of them are still regular attendees to NACAAs.

Pre-registration is open at this time, with conference pricing still to be confirmed. Accommodation for the conference is available at The Chifley hotel, at the conference centre.

Details of the conference, the Penrith Convention Centre, and accommodation can be found through the NACAA website: www.nacaa.org.au



Penrith Panthers Convention Centre, Penrith (NSW)

Skywatcher Events for NOVEMBER

Events for NOVEMBER

- 10th to 23rd - Leonids meteor shower is active with maximum activity on the 18th, after midnight (Z.H.R. of upto 15). Radiant in North-Eastern sky.
- 1st Oct to - Southern Taurids meteor shower is active with maximum activity on the 5th, from late evening to early morning (Z.H.R. of 5).
- 2nd - Last Quarter Moon.
- 6th - Venus 3° North of Moon (6am).
- 8th - Mercury 7° North of Moon (10pm).
- 10th - New Moon.
- 16th - Mars stationary (3am).
- 17th - Occultation of Neptune by the Moon (10pm).
- 18th - First Quarter Moon.
- 19th - Uranus 2° South of Moon (10pm).
- 25th - Full Moon.
- 25th - Uranus stationary (5am).

Events for DECEMBER

- 7th to 18th - Geminids meteor shower is active with maximum activity on 13th/14th, from late evening, til dawn. (Z.H.R. of 120). Radiant in Low North-Eastern sky.
- 1st to 31st - Comet 8P/Tuttle brightens throughout December from 9.5 Mag to about 6th Mag at months end.
- 1st - Saturn 2° North of Last Quarter Moon (12am).
- 10th - New Moon.
- 15th - Neptune 0.7° North of Moon (5am).
- 17th - Uranus 2° South of First Quarter Moon.
- 20th - Saturn stationary (11pm).
- 22nd - Summer Solstice.
- 24th - Full Moon.
- 25th - Mars at opposition (7am)
- 25th - Jolly Man in Red Suit May be visable (depends on Naughty or Nice?)
- 31st - Last Quarter Moon.

Birds of the So

The final Skywatcher for 2007 takes a look at our Great Birds of the Southern hemisphere, the constellations Apus, Grus, Pavo, Phoenix, and Tucana.

These are 5 of the 12 constellations introduced into the southern skies at the end of the 16th century by the Dutch navigators Pieter Dirkszoon Keyser and Frederick de Houtman.

Up until this point, constellation recording went back to the time of the ancient Greeks, many of which were recorded by Ptolemy. Unfortunately they left many gaps in the sky, and they could not observe stars that were far into the Southern Hemisphere. This was left to european explorers to map the stars of the southern skies.

Keyser's and de Houtman's 12 new constellations were included in German



Apus - The Bird of Paradise

This constellation's name derives from an exotic bird native to New Guinea. Apus is the Greek word for footless, which also describes the swallow in flight.

Apus is a faint southern constellation, however with a bit of searching (and a favourable moon) NGC 6101 and IC 4499 should be viewable.



Grus - The Crane

Grus is the crane. Until the 17th century it was considered part of the constellation Austrinus.

Spiral galaxy NGC 7424 with a prominent core, grand, winding arm, a million light-years across.

Brightest star alpha (the white one), the white one of spectral class B.

RISE and SET

	Sun				Moon			Mercury		Venus		Mars		Jupiter
	Twilight Begins	Rise	Set	Twilight Ends	Rise	Set	Phase	Rise	Set	Rise	Set	Rise	Set	Rise
Nov 3	04:33	06:12	19:56	21:35	02:55	13:36	Waning to Last Q. Moon	05:36	18:27	04:18	16:04	00:38	10:05	08:30
10	04:23	06:05	20:04	21:46	05:42	20:35	New Moon	05:23	18:25	04:10	16:12	00:15	09:41	08:08
17	04:14	05:59	20:11	21:56	11:43	01:29	Waxing to 1st Q. Moon	05:19	18:44	04:03	16:22	23:49	09:13	07:47
24	04:07	05:55	20:19	22:07	20:13	04:56	Almost Full Moon	05:19	19:11	03:57	16:32	23:21	08:42	07:25
Dec 1	04:01	05:52	20:26	22:17	01:23	12:29	Last Quarter Moon	05:23	19:39	03:51	16:44	22:50	08:07	07:04
8	03:58	05:51	20:32	22:26	04:15	19:28	Nearing New Moon	05:30	20:08	03:45	16:56	22:16	07:30	06:43
15	03:57	05:52	20:38	22:33	10:42	00:29	Waxing to 1st Q. Moon	05:42	20:35	03:41	17:09	21:40	06:50	06:23
22	03:59	05:54	20:42	22:37	20:02	03:29	Nearing Full Moon	06:00	20:59	03:37	17:23	21:02	06:09	06:02
29	04:04	05:59	20:45	22:39	00:12	11:17	Waning to Last Q. Moon	06:23	21:20	03:36	17:37	20:23	04:28	05:41

* All times in AEDT.

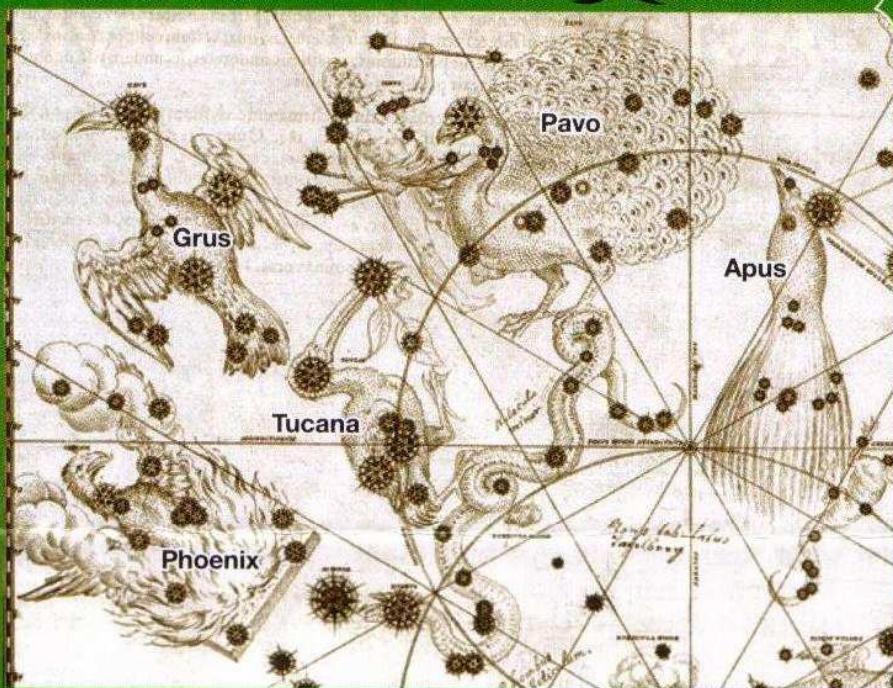
NOVEMBER and DECEMBER 2007

Southern Sky

Astronomer Johann Bayer's book *Uranometria*, published in 1603. The *Uranometria* was to become definitive star atlas of its time.

Bayer followed accepted tradition and named some of these new constellations after mythological creatures, and others after recently identified animals.

In 1922, when the International Astronomical Union (IAU) officially adopted the modern list of 88 official constellations, this included the Great Birds of the Southern Hemisphere.

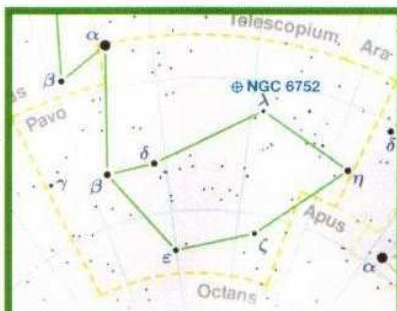


An illustrated star chart from astronomer Johann Bayer's book, *Uranometria*, first published in 1603. Image Source: Linda Hall Library of Science, Engineering and Technology.



Grus - The Crane
The Latin word for crane is Grus, part of Piscis.

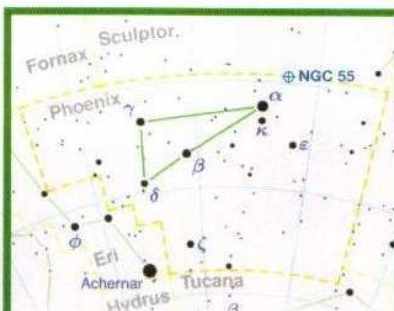
NGC 7424 is a central bar and arms about 40 light years from us. Its star is Alnair (1.7 magnitude) a green light bluish star B5.



Pavo - The Peacock

The peacock referred to is the one which had its tail decorated by the 100 eyes of the giant monster, Argus, who lost his head as the result of a dispute between Zeus and Hera over Zeus' affair with Io.

Pavo contains NGC 6752, a 6th Mag globular cluster, and also contains the Devil's Mask a triplet of spiral galaxies (NGC 6769, 6770, and 6771 - very faint).



Phoenix - The Firebird

The legendary bird that lived for 500 years and then consumed by fire, from the ashes of which a new Phoenix arose.

Within Phoenix, a grouping of gravitationally-interacting galaxies, collectively known as the Robert's Quartet (NGC 87, 88, 89, & 92 - very faint). Just bordering Phoenix is NGC 55, a bright elongated spindle galaxy.



Tucana - The Toucan

This constellation's name derives from the brightly-marked tropical bird from South America with enormous colourful beak.

Tucana contains the bright globular clusters (NGC 104), also known as 47 Tucanae, at 20,000 light years away. NGC 104 is the second largest and brightest globular cluster observable (after Omega Centauri) with a magnitude of 5.0.

RAISE TIMES

Jupiter	Saturn		Uranus		Neptune		Date
	Set	Rise	Set	Rise	Set	Rise	
23:07	03:39	14:38	15:14	04:03	13:07	02:53	3 Nov
22:46	03:13	14:13	14:46	03:35	12:40	02:25	10
22:25	02:47	13:48	14:18	03:08	12:12	01:58	17
22:04	02:20	13:22	13:51	02:40	11:45	01:31	24
21:44	01:54	12:56	13:23	02:13	11:18	01:04	1 Dec
21:23	01:27	12:29	12:56	01:45	10:51	00:33	8
21:03	00:56	12:02	12:29	01:18	10:25	00:05	15
20:42	00:28	11:34	12:02	00:47	09:58	23:38	22
20:22	00:01	11:06	11:35	00:20	09:32	23:11	29

These times and much more celestial information can be found in the excellent annual Australian publication, *ASTRONOMY 2007*.

Soon to be available for purchase from the club will be *ASTRONOMY 2008*. These publications are aimed at all levels of amateur astronomer, from newcomer to expert. See page 4 for more information about *ASTRONOMY 2008*.



Society Pics

Astronomical Style Holiday

A holiday I had wanted to do for several years was to travel along the Newell highway, looking at the astronomical observatories (and much more) along the way. In August-September, that opportunity finally arrived, and my brother and I took a 4-week holiday. The astronomical facilities visited were as follows:

Parkes: There is an impressive (and free) visitors centre at the radio telescope, and as well, it is close to the 'dish', providing a good view.

Gilgandra: As we spent a night at Gilgandra, I had the opportunity to attend one of the observing sessions. These consisted of three short astronomy-themed videos, a look at displays around the observatory, and viewing through the 12-inch Newtonian telescope.

Coonabarabran: I visited the Skywatch Observatory during the afternoon, and had a look at the Sun through a Meade 8-inch scope (although no sunspots could be seen); as well as having a look through the displays in the building. There are other telescopes there, the largest being 12-inch.

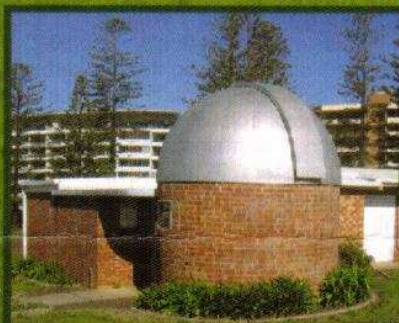
Siding Spring: This was a bit of a disappointment, as only the visitors centre/Exploratory was open at the time of our visit. Due to maintenance work, there were no guided tours, and the viewing platform for the Anglo-Australian Telescope was closed.

Port Macquarie: I arranged to have a look at the Port Macquarie Observatory during the afternoon. Their largest scope is 14-inch, although spray from the seaside location does not help with viewing.

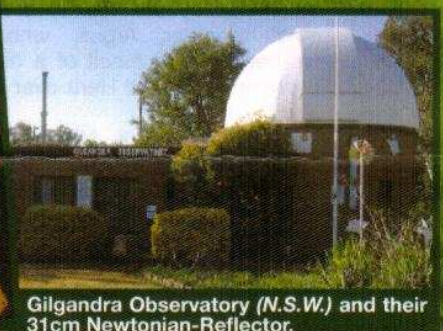


The 64m "Dish" at Parkes (N.S.W.) off in the distance.

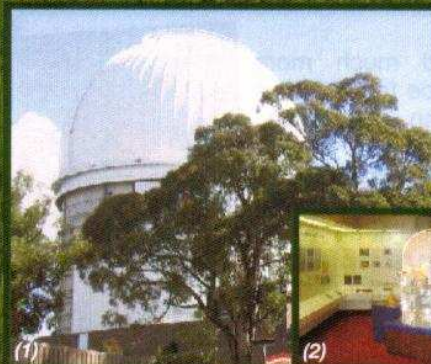
Article and pictures by M.P.A.S. member
John Cleverdon, 2007.



Port Macquarie Observatory (N.S.W.) with insert pictures showing their visitor's centre, and the 14" telescope.



Gilgandra Observatory (N.S.W.) and their 31cm Newtonian-Reflector.



The Siding Springs observatory at Coonabarraban (N.S.W.).

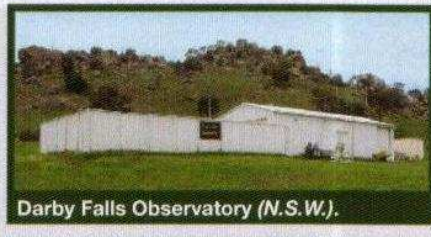
From Left to Right: (1) The Anglo-Australian Telescope Facility housing the 3.9m telescope; (2) The Siding Spring 'Exploratory' visitors & education centre; (3) the U.K.-Schmidt Telescope Facility housing the 1.2m telescope.

Along the way to Siding Spring is the Skywatch Observatory (4) with their 12" Newtonian-Reflector (5).

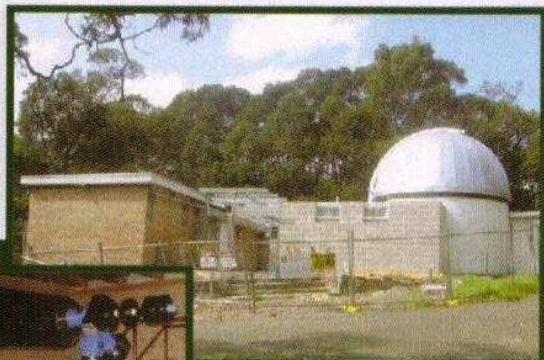
Society Pics



Linden Observatory (N.S.W.) and their 24" telescope.



Darby Falls Observatory (N.S.W.).



Above: Building work continues at Sutherland Astronomical Society's Green Point Observatory (N.S.W.).
Far Left: Sutherland's dome observatory houses their 16" Newtonian-Reflector telescope.
Left: Sutherland's 14" telescope.



Narrabri: The Australia Telescope has a free and interesting (although unstaffed) visitors centre, with a good view over the dishes. Some of the old radio heliograph antennae can be seen on the way in to the site, and at the site, there are buildings from the old solar telescope, the IPS, and other equipment.

Windsor: While in Sydney, I travelled out to Windsor to have a look at the John Tebbutt Observatory. While the building is no longer used for observations (AFAIK), there is a restaurant on the site.

Green Point/Sutherland: I also arranged a visit to the Sutherland Astronomical Society's Green Point Observatory. They have a good facility, with rooms for various purposes and 14- and 16-inch telescopes.

Linden: Heading through the Blue Mountains, I stopped by at the Linden Observatory for a brief visit. This is used by the Western Sydney Amateur Astronomy Group as well as supernova hunter Bob Evans; and has 24- and 30-inch telescopes.

Darbys Fall: Near Cowra is the Darbys Falls Observatory, which does talks and viewing sessions. This has a couple of large (16- and 20-inch) Newtonians as well as smaller scopes.

Thanks in particular to Matthew Wallace (Port Macquarie), Vic & June Audet (Sutherland), Alan Plummer (Linden) and Mark Monk (Darbys Falls) for showing me around their facilities. The observatories at Dubbo, Springbrook (Gold Coast hinterland), Kings Tableland (Blue Mountains) and Bathurst (just off the Mt Panorama circuit) were all passed by, however, they were closed at the time of our visits.

I did little viewing of my own, as I just had binoculars. This consisted of some deep-sky viewing at Gympie (taking advantage of the northerly location), and watching the lunar eclipse from Newcastle.

John Cleverdon



Cloudy day, no problem. Pictured are two of the six 22m antennas used for radio astronomy at the Australian Telescope Compact Array (ATCA) at Narrabri (N.S.W.)

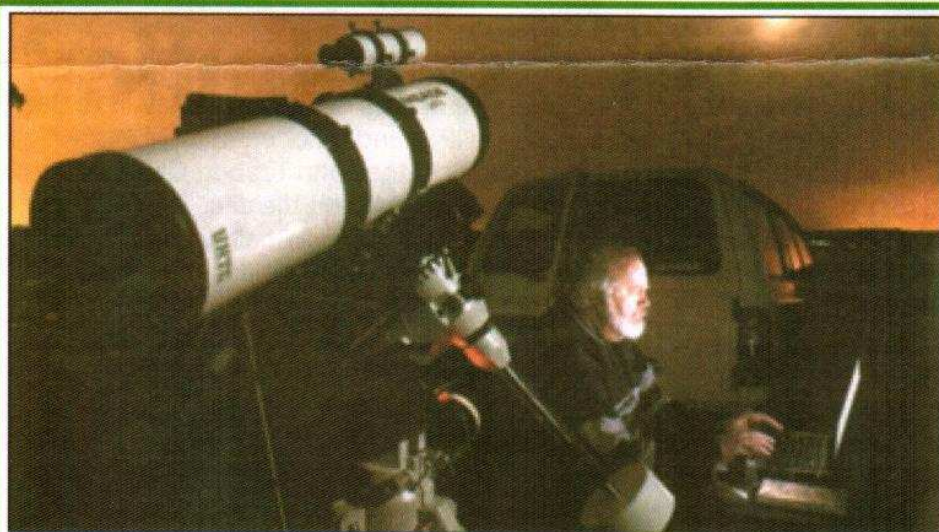
Society Pics



The Moon & Mercury - Photographed by Marty Rudd (13.9.07)
 Canon EOS 400D Digital, Focal Length 135mm,
 F/Stop 4.5, ISO: 3200, Exposure: 2 sec



The Milky Way - Photographed by Helmuth Schultes
 Canon EOS 20Da mounted on G.E.M., F/Stop 4.5, ISO: 3200, Exposure: 122 sec



Great sight: Helmuth Schultes captured the eclipse on his computerised telescope. **Picture:** Gary Sissons

While not actually an astro pic, some creative photography from Gary Sissons (from Independent Newspapers) captured M.P.A.S. member Helmet Schultes doing some lunar photography, the night of the Total Lunar Eclipse back in August.

This article appeared in the Frankston Independent on 11th of September.

Image: Courtesy of Fairfax Community Newspapers

A growing activity in the society, is the experimentation with astrophotography. As a result, members are getting great shots of the night (and daytime) sky.

To show you what members are photographing, Scorpius will be setting aside a page each edition to show case these images.

So don't be shy, if you have an image which you would like to share, send it in to:

scorpius@mpas.asn.au

A brief description of the image and any story behind the picture is also required. These images will also be available online to view at:

www.mpas.asn.au

The following is some information you may wish to include with your image. It helps others see how you achieved your shot.

- Photograph By
- Date / Time
- Location
- Intruments Used
- Exposure, F stop, ISO, etc.

Keeping moon watch

IT looked as if it was going to be a huge disappointment for astronomers gathered at The Briars to view last Tuesday's lunar eclipse.

Then the clouds parted to provide a clear view of a sparkling crescent as the earth's shadow completed its eclipse.

It wasn't until about two hours later, as the moon fully emerged following a spectacular display, that the clouds again converged, obscuring the moon again.

It couldn't have been better scripted, Mornington Peninsula Astronomical Society member Helmuth Schultes said.

"We were all looking forward to it/

"It's not often you get a lunar eclipse so early in the evening.

"Everyone was pretty happy, especially when the clouds went away."



More than 30 people gathered to watch the eclipse at The Briars in Mount Martha, where MPAS had 10 telescopes set up on its two observatory platforms.

Mr Schultes took more than 1000 photos of the eclipse with his computerised 'go to' telescope, so called because he can point to an object on a map of the universe on his computer

screen and the telescope will go to that object in the sky.

The six-inch telescope is capable of up to 300 times magnification and can accommodate a digital video camera to capture celestial events in high-definition video.

Mr Schultes is turning his attention to a meteor shower early next month.

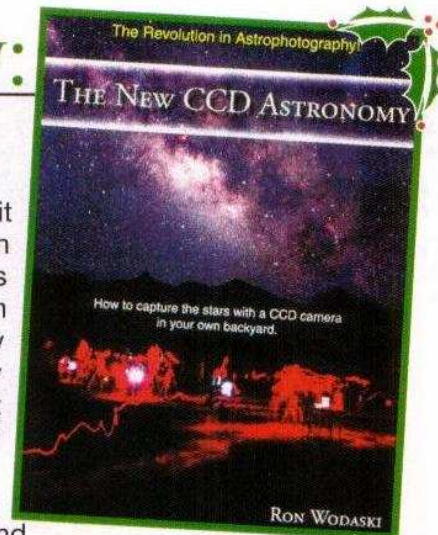
With its base at The Briars, which is relatively undisturbed by the ambient light of the city, MPAS is one of Victoria's premier astronomy groups.

It holds public viewings on the first Friday of every month from 8pm at the Briars Visitors Centre.

For more information, call MPAS on 0419253252; email welcome@mpas.asn.au or check out www.mpas.asn.au, where you can view Mr Schultes' work.

SOCIETY BOOK REVIEW:

'The New CCD Astronomy' by Ron Wodaski. Book Review by Peter Lowe.



In 1869 when the Great Melbourne Telescope commenced work it featured a speculum main mirror and not one of those fancy new, unproven silver coated glass mirrors. I dare say these days there are very few amateurs who have even seen a speculum mirror. In 1869 the death knell of speculum mirrors had not yet been sounded but it was very close. A comparable story can be said today about astrophotography. The death knell of film photography has not yet sounded but electronic photography is closing the gap very fast. At an MPAS viewing night you would be hard pressed to find a film camera and from an astronomical viewpoint film is almost dead.

The instrumentation, at affordable prices, available to the modern amateur is mind-boggling. Robotic telescopes with superb optics and computerised GOTO controls only need an electronic camera to become the complete amateur-observing machine. To get the most out of this new technology needs a new set of observing skills as much at the computer as those at the telescope. These new skills are mostly learnt by trial and error but some promising books are appearing to give the amateur astrophotographer a helping hand into the world of image capture and image processing.

One such book, which has recently become available in the M.P.A.S. library, is the "The New CCD Astronomy" by Ron Wodaski.

I say image capture and image processing because astrophotography has always been a two sided coin. To take a great astrophotograph you need to capture a great image after which you need the image processing skills at the computer to extract the required data or picture.

Digital SLR cameras have made image capture as simple as point and shoot, allowing the amateur to concentrate on image process at the computer. More advanced amateurs may choose to use one of the specialised cooled CCD cameras enabling the more precise photography needed for serious observational astronomy. Whichever way you choose to capture your images, the processing methods are essentially the same.

Wodaski's book is aimed at the more advanced cooled CCD cameras and considers the various types of cameras, mounts, optical systems, drive specifications, image capture techniques and the operational aspects of bringing things together. This is not to say the conventional digital astrophotographers would not find this book useful. The second half of the book explores the various processing tools available and how to handle some of the common problems encountered. It takes a straightforward step-by-step view of the common software tools and how they are used to bring the best out of your raw image.

The book does require some basic knowledge of photography but not enough to frighten the average amateur. I do have one criticism of the book. The chapter on colour photography does not have a single colour image. It takes me back to the days of black and white television when you had to imagine the colours.

I found the book logically structured, easy to read and definitely useful to the amateur who has decided to explore astrophotography.

Peter Lowe.



Mornington Peninsula Astronomical Society Inc. ANNUAL GENERAL MEETING ELECTIONS

Nominee: _____

Proposer: _____

Seconder: _____

} Must be current financial members

Position: **Office Bearers:** President Vice President Treasurer Secretary
(tick 1 or more*) **Ordinaries:** Public Officer Ordinary Committee Member (5 of these)

Acceptance Signature of Nominee: _____

Submit 1 day prior to the Annual General Meeting.

Post to M.P.A.S., PO Box 596, Frankston, VIC. 3199.

* Note : (1) That one person cannot nominate for multiple Office Bearer positions. (2) The committee is responsible for the development and operation of the society according to the MPAS Constitution. To support this, all committee members are expected to take responsibility for some aspect of society business

Office bearers of the Mornington Peninsula Astronomical Society

President: Peter Lowe - 0419 355 819
Vice President: Ian Sullivan
Editor: Peter Lowe
Committee: Peter Skilton, Kevin Rossiter,
 Terry Ryan, Bob Heale
Librarian: Andrew Thorton
Phone Contact: Peter Skilton

Secretary: Don Leggett - 5985 4977
Treasurer: Marty Rudd - 5977 8863
Public Officer: Rhonda Sawosz

Web Master: Steven Mohr

GENERAL MEETINGS

Meeting Venue: Peninsula School, Wooralla Drive, Mt. Eliza, (Melways map 105/F5) in the Senior School at 8pm, on the 3rd Wednesday of each month, except December.

Phone: 0419 253 252

Mail: P.O. Box 596, Frankston 3199, Victoria, Australia.

Internet: <http://www.mpas.asn.au>

email: welcome@mpas.asn.au

LOAN EQUIPMENT

The Society has an 8-inch reflector, 80mm refractor and binoculars available for loan. Contact Kevin Rossiter or a committee member to arrange the loan of equipment. The Society also has books and videos for loan from it's library, made available during General Meetings.

CONTRIBUTIONS TO SCORPIUS

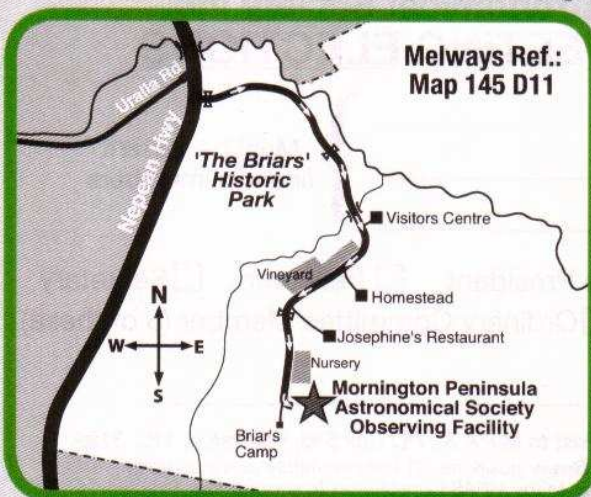
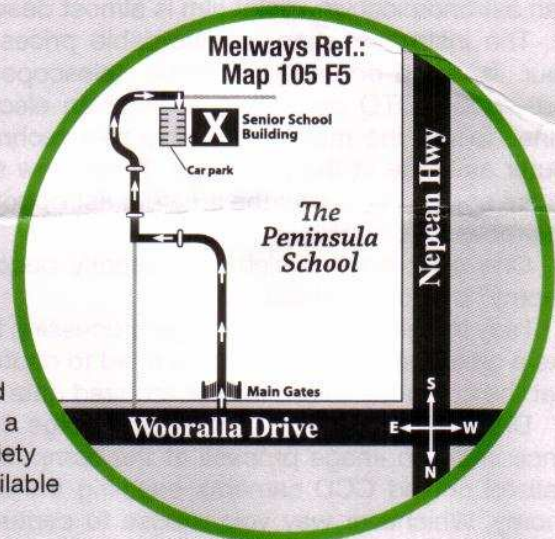
If you would like to submit an article or written contribution to Scorpius, then please send your submission to M.P.A.S., P.O. Box 596, Frankston 3199, or email you can now email to scorpius@mpas.asn.au.

Any astronomical events that you have witnessed or tales you would like to tell, things you have for sale (eg: telescopes, eyepieces, etc.) then please send them in. And the new **Society Pics** page requires images that you have taken for all members of the society to see - don't keep them to yourself! All contributions are welcome.

E— SCORPIUS NEWSGROUP

The M.P.A.S. has an online newsgroup called E-Scorpius. Here you will be kept up to date with the latest M.P.A.S. news and event information as well as being able to join in discussions and ask questions with other members. To join, go to <http://groups.yahoo.com> and sign up to Yahoo groups. You require to sign up to Yahoo groups to join E-Scorpius.

Once you have signed up at Yahoo groups, email skywatch@iprimus.com.au saying that you want to join E-Scorpius and you will be added to the E-Scorpius list. Come on, join up. The more people in the group the better.



VIEWING NIGHTS — MEMBERS ONLY

Any night, at The Briars, Nepean Hwy, Mt. Martha, starting at dusk. If you would like to know if others are observing at the site, then call the society's site mobile on 0408 127 443.

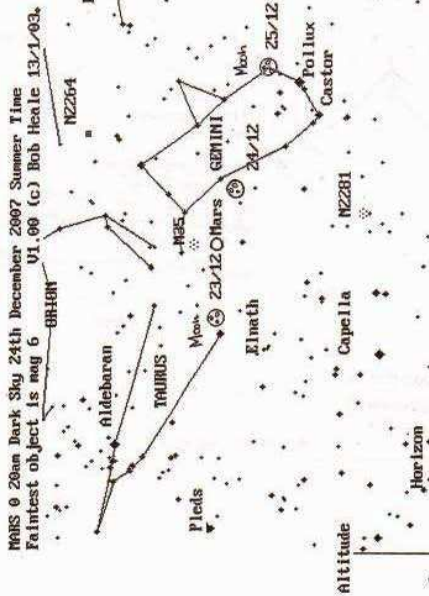
Members visiting The Briars for the first time must contact Greg Walton on either 9773 0098 or 0415 172 503 if they need help in getting to the site. Upon arrival at the site, remember to sign the attendance book in the observatory building to verify that the mobile is turned on.

Getting ready for the night ahead 17 November 2007

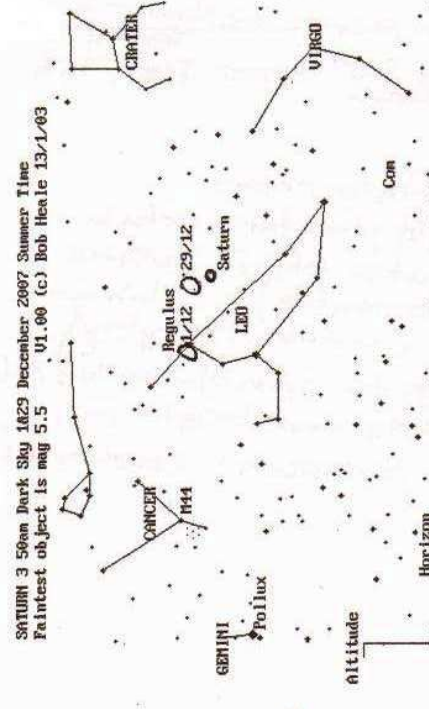




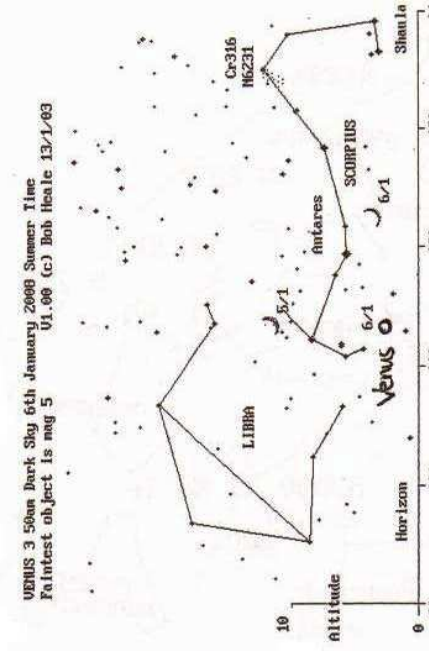
SKY FOR THE PERIOD 21ST NOVEMBER 2007 - 16TH JANUARY 2008 MORNINGTON PENINSULA



MARS @ 20am Dark Sky 24th December 2007 Summer Time
Faintest object is mag 6 N2264
U1.00 (c) Bob Heale 13/1/03



SATURN @ 50am Dark Sky 18th December 2007 Summer Time
Faintest object is mag 5.5 U1.00 (c) Bob Heale 13/1/03



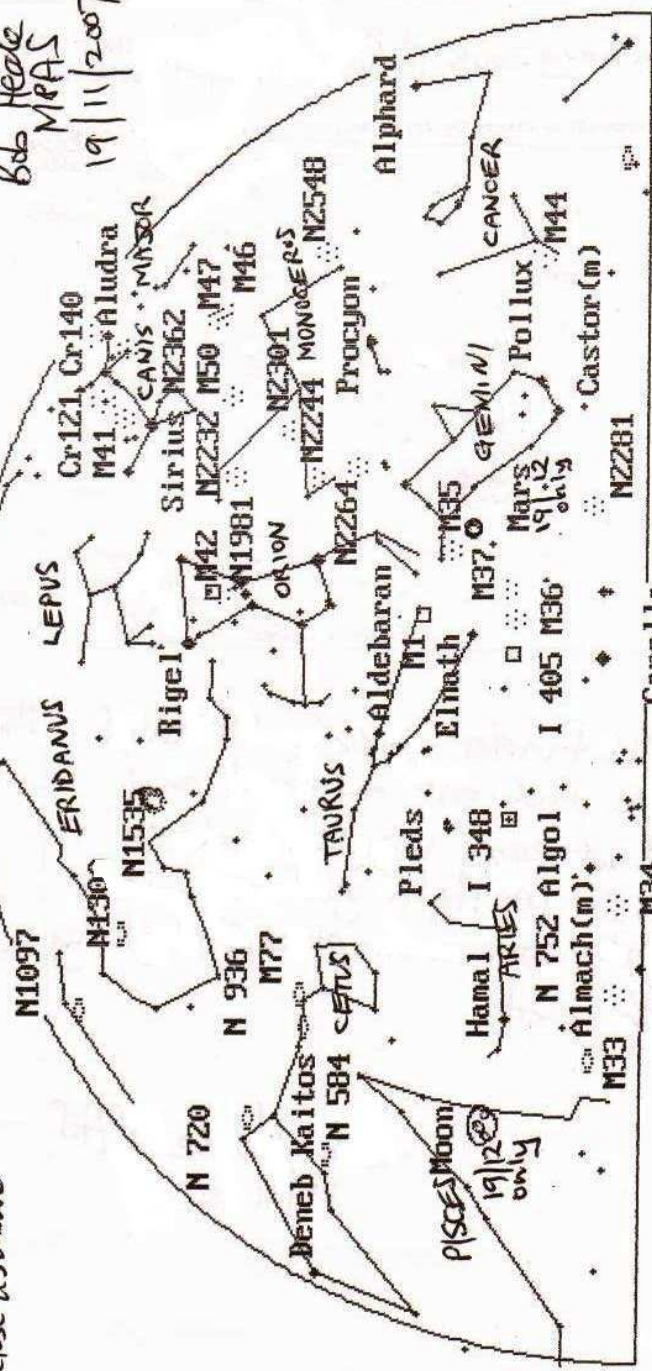
VENUS @ 350am Dark Sky 6th January 2008 Summer Time
Faintest object is mag 5 U1.00 (c) Bob Heale 13/1/03

Mars now in very pleasant night summery sky; on 3/12 ~ to north Eta-Gemini (m); Moon is n/w also on 26-27/11, and Moon is close as above

Saturn does a tight loop SW to NW above LEO; almost motionless. Moon near 30/11 to 2/12 and 28, 29/12

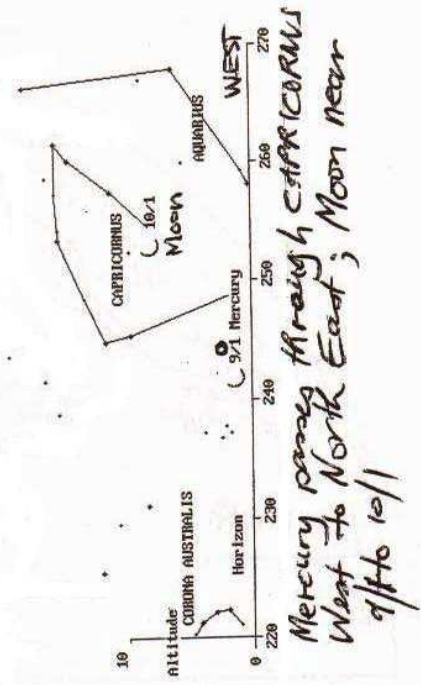
Venus does a fast sweep through m/n/w to dark to a slightly twinkling ESE sky. Moon is generally south of Venus. On 1/1/08 Moon x 2.0 South Spica (low and a bit bright). Mid Dec sees Ven w/s slightly north of alpha Librae. On 4/1 - 5/1 Moon passes over? M4 then Antares (bit bright)

Bob Heale
MPAS
19/11/2007

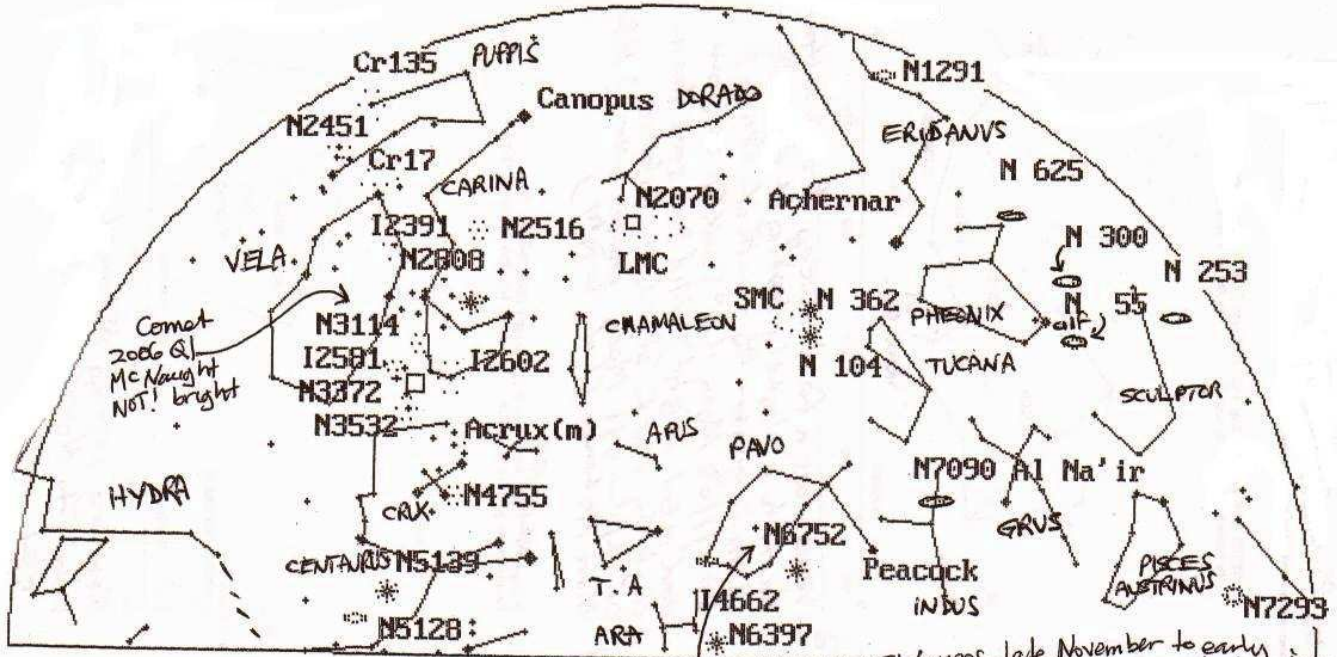


January 2008 @ 25 am 19th December North Dark Sky 2007 Summer Time, 16th 10 40 pm, 21st November 2007 1 30am

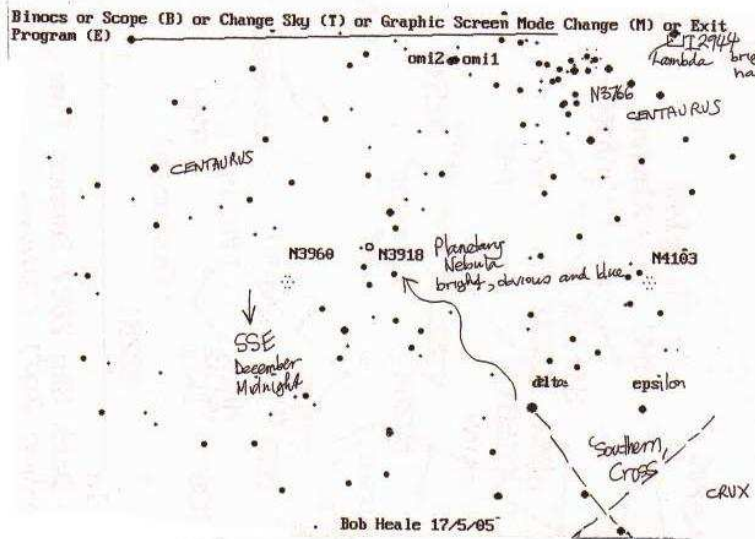
MERCURY @ 9 22am Dark Sky 9th January 2008 Summer Time
Faintest object is mag 5.5 U1.00 (c) Bob Heale 13/1/03



Mercury passes through Capricornus West to North East; Moon near 9/1 to 10/1



January 2008 @ 25am 19th December South Dark Sky 2007 Summer Time, 16th
 10 40pm, 21st November 2007 1 30am



← This finder chart for bright planetary nebula N3918 above left of Southern Cross (times a bit) ... within an obvious isosceles triangle or ... go for open cluster N3766 very wide and bright or double omicron Centaurii

This finder → refer PHEONIX above and alf to find and look at easy biggish galaxy N55 faint galaxy - its brighter core is displaced slightly north east.

Bob Heale MPAS
 19/11/2007

