

AUGUST 2004

# VollieNews

NEWSLETTER OF THE POVG - THE PERTH OBSERVATORY VOLUNTEERS' GROUP INC.



Volunteers required to staff the Observatory display at WA on Show - the WA 175th Anniversary display at the new Convention Exhibition Centre.

Activities will be similar to those at the display at the 2002 Royal Show. Hours are 0900 to 1800 each day.

Please contact Peter Birch ASAP if you want to help. Thanks, Jamie Biggs

#### TENTATIVE ROSTER

Day	date	time		
	Sun 29	0900 - 1300		
		1100 - 1600		
		1300 - 1800		
	Fri 27 Aug	0900 - 1300		
		1300 - 1800		
	Sat 28	0900 - 1300		
		1100 - 1600		
		1300 - 1800		
	Mon 30	0900 - 1800		
		1300 - 1800		
	Tues 31	0900 - 1300		
		1300 - 1800		

In this issue: POVG's Meeting Minutes | Phases of the Moon  
 Dates & Times for Vollie Training and Meeting Nights | Astronomy news & events for Aug | Shoemaker-Levy Trip

# Astro News

## CONTROLLERS WORKING TO FIX MARS ROVER PROBLEMS NAS

As Spirit rover has climbed higher into rocky hills on Mars, and its twin, Opportunity, has descended deeper into a crater, but both rovers, for the time being, are operating with some restrictions while team members diagnose unexpected behaviour. <http://spaceflightnow.com/mars/morw/040804status.html>

## GAMMA-RAY BURST WAS NEW TYPE OF COSMIC EXPLOSION

Astronomers have identified a new class of cosmic explosions that are more powerful than supernovae but considerably weaker than most gamma-ray bursts. The discovery strongly suggests a continuum between the two previously-known classes of explosions. <http://spaceflightnow.com/news/n040804grb/>

## SOUTH POLAR STRUCTURE OF SATURN IMAGED BY CASSINI

Saturn's southern polar region exhibits concentric rings of clouds which encircle a dark spot at the pole. To the north and toward the right, wavy patterns are evident, resulting from the atmosphere moving with different speeds at different latitudes. [http://spaceflightnow.com/cassini/040804south\\_pole.html](http://spaceflightnow.com/cassini/040804south_pole.html)

## IS THE SOLAR SYSTEM SPECIAL?

On the evidence to date, our solar system could be fundamentally different from the majority of planetary systems around stars because it formed in a different way. If that is the case, Earth-like planets will be very rare. [http://spaceflightnow.com/news/n040803solar\\_system/](http://spaceflightnow.com/news/n040803solar_system/)

## TITAN'S PURPLE COVERING POINTS TO A FUZZY PAST

Encircled in purple stratospheric haze, Saturn's largest moon, Titan, appears as a softly glowing sphere in this colorized image taken on July 3, one day after Cassini's first flyby of that moon. Titan has a dense atmosphere composed primarily of nitrogen with a few percent methane. The atmosphere can undergo photochemical processes to form hazes. <http://spaceflightnow.com/cassini/040730titanpurple.html>

## CATCHING A FALLING STAR

While observing a supernova in a distant galaxy with the Very Large Telescope at Paranal Observatory, astronomers were incredibly lucky to obtain serendipitously a high quality spectrum of a very large meteor in the terrestrial atmosphere. <http://spaceflightnow.com/news/n040731meteor/>

## NEUTRINOS LINKED TO 'DARK ENERGY'

Two of the biggest physics breakthroughs during the last decade are the discovery that wispy subatomic particles called neutrinos actually have a small amount of mass and the detection that the expansion of the universe is actually picking up speed. <http://spaceflightnow.com/news/n040730neutrinos/>

## MESSENGER AWAITS LAUNCH ON MARATHON TREK TO MERCURY

Taking the economy route, NASA's MESSENGER spacecraft will spend six-and-a-half years just getting to its target for at least one year of scientific observations. The 4.9-billion-mile marathon will require 15 trips around the sun, six trajectory-warping planetary fly by and another half-dozen critical rocket firings. Launch is set for early Monday from Cape Canaveral, Florida. This is our four-part, 4,000-word mission preview. <http://spaceflightnow.com/della/0307/040729preview1.html>

## NASA LOOKS TO NEW ASTRONOMY MISSION IDEAS NASA

has selected nine studies to investigate new ideas for future mission concepts within its Astronomical Search for Origins Program. Among the new missions are some that will survey one billion stars within our own galaxy, measure the distribution of galaxies in the distant universe, study dust and gas between galaxies, study organic compounds in space and investigate their role in planetary system formation and create an optical-ultraviolet telescope to replace the Hubble Space Telescope. <http://spaceflightnow.com/news/n040729origins/>

## SWIFT TO CATCH MYSTERIOUS BURSTS FROM DEEP IN COSMOS

The Swift satellite, which will pinpoint the location of distant yet fleeting explosions that appear to signal the births of black holes, arrived at Kennedy Space Centre Thursday in preparation for an October launch. <http://spaceflightnow.com/news/n040729swift/>

## HAZY ALL OVER TITAN

Following its first flyby of Titan, Cassini gazed back at the smog-enshrouded moon's receding crescent. This natural colour view was seen by the spacecraft about one day after closest approach. The slight bluish glow of Titan's haze is visible along the limb. [http://spaceflightnow.com/cassini/040729titan\\_haze.html](http://spaceflightnow.com/cassini/040729titan_haze.html)

## MYSTERIOUS PLASMA JETS ON THE SUN EXPLAINED

Solar physicists from Lockheed Martin and the Solar Physics and upper-Atmosphere Research Group at the Department of Applied Mathematics of the University of Sheffield, UK have used computer modelling and some of the highest resolution images ever taken of the solar atmosphere to explain the cause of supersonic jets that continuously shoot through the low atmosphere of the Sun. <http://spaceflightnow.com/news/n040728plasmajets/>

## STELLAR PAIR SHOT OUT FROM SUPERNOVA BIRTHPLACE

Astronomers studying data from the National Science Foundation's Very Long Baseline Array and other telescopes have concluded that a binary pair of stars forming an energetic micro quasar was blasted out of the cluster in which it was born by a supernova explosion some 1.7 million years ago. This is the first time that a fast-moving stellar pair has been tracked back to a specific star cluster. [http://spaceflightnow.com/news/n040728micro\\_quasar/](http://spaceflightnow.com/news/n040728micro_quasar/)

## ODD-LOOKING MOON MIMAS PHOTOGRAPHED BY CASSINI

Soon after orbital insertion, Cassini returned its best look yet at heavily cratered Mimas. The enormous crater at the top of this image, named Herschel, is about 80 miles wide and 6 miles deep. <http://spaceflightnow.com/cassini/040726mimas.html>

## SHIP-SINKING MONSTER WAVES REVEALED BY SATELLITES

Once dismissed as a nautical myth, freakish ocean waves that rise as tall as ten-story apartment blocks have been accepted as a leading cause of large ship sinkings. Results from the European Space Agency's ERS satellites helped establish the widespread existence of these 'rogue' waves and are now being used to study their origins. <http://spaceflightnow.com/news/n040726monsterwaves/>

# POVG Minutes

Perth Observatory Volunteer Group Inc

.Minutes of Meeting, July 12th 2004.

Present.

J.Alcroft. M. Freeman. E. Walker. M. Haslam.  
J. Biggs. J. Morris. L. Robinson. R. Tanello.  
D. Alderton. B. Harris. G. Lowe. A. Williams.  
F. Bilki.

Apologies.

G. Coletti. J. Bell. M. Zengerer. A.  
McNaughton. V. Semmler. T. Beston. J.  
Milner. V. Smith. L. Martin.

Confirmation of Minutes.

Agreed that the minutes were a true and  
correct record. Moved B.Harris. Seconded  
E.Walker.

Business arising from the Minutes.B. Harris  
reported that he had obtained Catalogues  
for Jackets and other clothing items from

"Allmark ", these to be retained by the  
Secretary for future reference.

Treasurer's Report.

B. Harris stated that the bank balance  
remained at \$210.33, and that a reply had  
been sent to the Taxation Dept confirming  
that the Group was a non profit organisa-  
tion.

General Business.

G.Lowe called attention to the dropping  
number of Volunteers, on checking the list  
it would appear that our numbers had  
reduced to roughly 15 active members, As  
20 volunteers are normally required to cover  
the season it would be necessary to advertise  
for a fresh intake in the near future.

G.Lowe stated that the end of season wind-  
up would commence at the "Hogsbreath  
Café in Northbridge at 6.30pm moving to  
the Planetarium at 8.30, finishing at 9.45 .

Members wishing to attend should confirm  
their booking with Greg by noon on Friday  
16th.

M.Freeman stated that an application had  
been lodged with the Commonwealth  
Government for a grant to purchase 15  
Jackets and Caps, these would remain the  
property of the group and would be handed  
back should the user cease to be a Volunteer  
with the Observatory.The Shoemaker trip  
now had 8 confirmed entries from the vol-  
unteers and at least another 8 from external  
contacts, and the possibility of a few more  
entries from other groups, a deposit of  
\$120.00 would need to be paid by the 26th  
July

There being no further General Business the  
meeting closed at 7.45

Next Meeting on 9th August

Only a couple of spaces left for the Shoemaker Impact Structure Field Trip. Book now!

**REMEMBER TO  
REGISTER YOUR  
DAYS (NIGHTS)  
AND HOURS**

In order to assist the Observatory  
plan its operations for 2004/2005  
could all vollies please register their  
intended number of days and hours  
per month in the programmes they  
are currently engaged in  
(eg. Star Viewing Nights ).

Please contact Greg Lowe with this  
information before 2004/07/01.

## The Observatory Star Viewing Night program

Begins on.....Friday Sept 17.

Generally ONLY on most Fri & Sat evenings  
until mid December when we expand  
things for a VERY BUSY JANUARY & FEB-  
RUARY.

The customers have voted with their feet  
basically to tell us that they don't want  
week nights for most of the season, but any-  
thing goes in the summer holiday  
times.The brochure will be out by July  
1...Peter.

## Shoemaker Impact Structure expedition, Sept. 8th - 12th.

I expect that Mike Freeman will be  
wanting commitments from those intend-  
ing to go on the Shoemaker Impact  
Structure expedition, Sept. 8th - 12th.  
Right, Mike?

Thanks to those who've already notified  
us of your intentions with regard to vollify-  
ing next season.Regards, Greg.

Have you joined  
the POVG  
Newsgroup yet?

If you've got any news, infor-  
mation or pics  
post them on the newsgroup.  
To join simply send your email  
address to Bevan Harris at:  
**ngc2070@bigpond.com**

To unsubscribe send an email  
to:  
**perthobsvollies-unsub-  
scribe@yahoo.com.au**  
To modify your subscription,  
visit the group website at:  
**http://au.groups.yahoo.com/m  
ygroups**

# Perth Observatory Volunteers' Group



2004/05  
Volunteer  
Training  
&  
Meeting  
nights

Training is important for our volunteers, they enjoy it and we need to support these staff members in return for the assistance they render.

Generally, these training nights are scheduled for 7pm the Monday after the week of Last Quarter.

This list (or a part thereof) is also displayed on the volunteer notice board. Your cooperation is appreciated. Jamie Biggs. Govt Astronomer.

2004

6 Sep; 11 Oct; 8 Nov; 6 Dec.

2005

10 Jan; 7 Feb; 14 Mar; 4 Apr; 9 May; 30 May; 4 Jul; 1 Aug.

## Perth Observatory Staff

Dr Jamie Biggs	Director and Govt Astronomer
Peter Birch	Astronomer
Ralph Martin	Astronomer
Dr Andrew Williams	Astronomer
Rick Tanello	Astronomer Assistant
Greg Lowe	Astronomer Assistant
Janet Bell	Administration Officer
Di Johns	Clerical Officer
Arie Verveer	Technical manager
John Pearce	Mechanical technician
Marc Appelhof	Maintenance Person/Cleaner

## POVG VOLUNTEERS

Mike Freeman	Chairperson
Elaine Walker	Vice Chairperson
John Morris	Secretary
Bevan Harris	Treasurer and newsgroup moderator (contact: ngc2070@bigpond.com)
Jeff Alcroft	Editor (contact: callides@iinet.net.au) or through newsgroup

## Observatory's Volunteers' Active Member List

Jeff Alcroft	Marcel Fortsch	Len Martin
Dick Alderson	Mike Freeman	Jacquie Milner
Jeanne Bell	Lynda Frewer	John Morris
Trevor Beardsmore	Bevan Harris	Lloyd Robinson
Lyall Bell	Don Hartley	Sascha Schediwy
Frank Bilki	Mark Haslam	Val Semmler
Tony Beston	Bert Hollebon	Vera Smith
Ric Boelen	Karen Kotze	Patricia Turner
Eve Cowlishaw	Erin Lalor	Elaine Walker
Giuseppe Coletti	Vic Levis	Sandra Walker
David Emrich	Rob Loney	Matthew Zengerer
Keith Ford	Andrew MacNaughtan	

## PHASES OF THE MOON FOR 2004

New Moon	First Quarter	Full Moon	Last Quarter
		Jan 7 23:40	Jan 15 12:46
Jan 22 05:05	Jan 29 14:03	Feb 6 16:47	Feb 13 21:40
Feb 20 17:18	Feb 28 11:24	Mar 7 07:14	Mar 14 05:01
Mar 21 06:41	Mar 29 07:48	<b>Apr 5 19:03</b>	<b>Apr 12 11:46</b>
<b>Apr 19 21:21</b>	<b>Apr 28 01:32</b>	May 5 04:33	May 11 19:04
May 19 12:52	May 27 15:57	Jun 3 12:19	Jun 10 04:02
Jun 18 04:27	Jun 26 03:08	Jul 2 19:09	Jul 9 15:33
Jul 17 19:24	Jul 25 11:37	<b>Aug 1 02:05</b>	<b>Aug 8 06:01</b>
<b>Aug 16 09:24</b>	<b>Aug 23 18:12</b>	Aug 30 10:22	Sep 6 23:10
Sep 14 22:29	Sep 21 23:53	Sep 28 21:09	Oct 6 18:12
Oct 14 10:48	Oct 21 05:59	Oct 28 11:07	Nov 5 13:53
Nov 12 22:27	Nov 19 13:50	Nov 27 04:07	Dec 5 08:53
Dec 12 09:29	Dec 19 00:40	Dec 26 23:06	

<http://www.wa.gov.au/perthobs/hpc5mr03.html>