

MAY 2005

VollieNews

NEWSLETTER OF THE POVG (PERTH OBSERVATORY VOLUNTEER GROUP INC).

HAS ORBITER FOUND NASA'S LOST MARS POLAR LANDER?

NASA's Mars Polar Lander disappeared as it arrived at the Red Planet in December 1999. Lacking any telemetry from the spacecraft, investigators could not pin-point with great certainty what caused the failure. Now, the orbiting Mars Global Surveyor satellite has apparently discovered the crash site.

<http://spaceflightnow.com/news/n0505/05mpl/>

CASSINI SHOWS AMAZING ICY MOONS OF SATURN

A scene straight out of science fiction, this fantastic view shows Saturn's moon's Mimas, Dione and Rhea, on the far side of Saturn's nearly edge-on rings.

<http://spaceflightnow.com/cassini/0505/05icy moons.html>

MARS ROVER FINDS ITSELF DITCHED IN SANDY TERRAIN

NASA's rover Opportunity has spun its wheels in a small dune, prompting extensive testing on Earth to determine how to get the craft freed.

<http://spaceflightnow.com/news/n0505/06mersand/>

SCIENTISTS DISCOVER PLUTO KIN IS MEMBER OF SATURN FAMILY

Saturn's battered little moon Phoebe is an interloper to the Saturn system from the deep outer solar system, scientists have concluded.

<http://spaceflightnow.com/news/n0505/07phoebe/>

CHANNELS ON TITAN?

It's hard not to speculate about the origins of the narrow, dark features seen in Cassini's new images of Titan's surface. They tantalize the viewer, resembling the dark channels

seen elsewhere on Titan, but are just at the limits of resolution of the images — too close to identify their true nature.

<http://spaceflightnow.com/cassini/0505/02channels.html>

SATURN'S MOON TITAN IS COMPLEX 'ANTI-GREENHOUSE'

This natural color image shows Titan's upper atmosphere — an active place where methane molecules are being broken apart by solar ultraviolet light and the byproducts combine to form compounds like ethane and acetylene. The haze preferentially scatters blue and ultraviolet wavelengths of light, making its complex layered structure more easily visible at the shorter wavelengths used in this image.

<http://spaceflightnow.com/cassini/0505/02antigreenhouse.html>

MARS EXPRESS RADAR PACKAGE TO BE DEPLOYED

The European Space Agency's Mars Express orbiter will soon deploy its radar instrument for the first time. The instrument is designed to look below the surface of Mars for different layers of material, most notably water.

<http://spaceflightnow.com/news/n0505/02marsexpress/>

ROCK HOUNDS SLEUTH RISE OF EARTH'S ATMOSPHERE"

CSI-like" techniques, used on minerals, are revealing the steps that led to evolution of the atmosphere on Earth. Studies over the last five years have led to a growing consensus by the scientific community of what happened to produce the protective ozone layer and atmosphere on our planet.

<http://spaceflightnow.com/news/n0505/03atmosphere/>

CASSINI CAPTURES SWISS-CHEESE LOOK AT SATURN MOON

An image of Saturn's small moon, Epimetheus, was captured by the Cassini spacecraft in the closest view ever taken of the pockmarked body. Epimetheus is irregularly shaped and dotted with soft-edged craters. The many large, softened craters on Epimetheus indicate a surface that is several billion years old.

<http://spaceflightnow.com/cassini/0504/28epimetheus.html>

'WONDERFUL' STAR REVEALS ITS HOT NATURE

For the first time an X-ray image of a pair of interacting stars has been made by NASA's Chandra X-ray Observatory. The ability to distinguish between the interacting stars — one a highly evolved giant star and the other likely a white dwarf — allowed a team of scientists to observe an X-ray outburst from the giant star and find evidence that a bridge of hot matter is streaming between the two stars.

<http://spaceflightnow.com/news/n0504/28interacting/>

COMET-BOUND DEEP IMPACT SPACECRAFT SPOTS ITS TARGET

Sixty-nine days before it gets up-close-and-personal with a comet, NASA's Deep Impact spacecraft successfully photographed its quarry, comet Tempel 1, at a distance of 39.7 million miles.

<http://spaceflightnow.com/news/n0504/27deepimpact/>

ORGANIC MATERIALS SPOTTED HIGH ABOVE TITAN'S SURFACE

During its closest flyby of Saturn's moon Titan earlier this month, the Cassini spacecraft found that the outer layer of the thick, hazy atmosphere is brimming with complex hydrocarbons. Scientists believe that Titan's atmosphere may be a laboratory for studying the organic chemistry that preceded life and provided the building blocks for life on Earth.

<http://spaceflightnow.com/cassini/0504/25titan.html>

IN THIS ISSUE:

Astro News

POVG's April Meeting Minutes

Phases of the Moon for May

Vollie Training and Meeting Nights

- Dates & Times for 2005

CASSINI FINDS PARTICLES NEAR SATURN'S MOON ENCELADUS

The Cassini spacecraft has discovered intriguing dust particles around Saturn's moon Enceladus. The particles might indicate the existence of a dust cloud around Enceladus, or they may have originated from Saturn's outermost ring, the E-ring.

<http://spaceflightnow.com/cassini/050426enceladus.html>

HUBBLE SHOWS STELLAR SPIRE IN THE EAGLE NEBULA

Appearing like a winged fairy-tale creature poised on a pedestal, this object is actually a billowing tower of cold gas and dust rising from a stellar nursery called the Eagle Nebula. The soaring tower is 9.5 light-years or about 57 trillion miles high, about twice the distance from our Sun to the next nearest star.

<http://spaceflightnow.com/news/n0504/25eagle/>

CASSINI PRODUCES THREE STUNNING NEW VIEWS OF TITAN

These three views of Saturn's moon Titan from the Cassini spacecraft illustrate how different the same place can look in different wavelengths of light. Cassini's cameras have numerous filters that reveal features above and beneath the shroud of Titan's atmosphere.

<http://spaceflightnow.com/cassini/050422titan.html>

SEA LAUNCH TO PUT UP DIRECTV SATELLITE TUESDAY A powerful new satellite promising to bring direct-to-home broadcaster DIRECTV into the fast-growing

market for high-definition television is waiting to be hauled into orbit Tuesday morning from a platform in the remote Pacific Ocean.

<http://spaceflightnow.com/sealaunch/spaceway1/status.html>

GALAXY CLUSTERS, NEAR AND FAR, HAVE A LOT IN COMMON

Using two orbiting X-ray telescopes, a team of international astronomers has examined distant galaxy clusters in order to compare them with their counterparts that are relatively close by.

<http://spaceflightnow.com/news/n0504/23clusters/>

COSMIC SHELL-SEEKERS FIND A BEAUTY THANKS TO CHANDRA

Image, made by combining 150 hours of archived Chandra X-ray Observatory data, shows the remnant of a supernova explosion. The central bright cloud of high-energy electrons is surrounded by a distinctive shell of hot gas.

<http://spaceflightnow.com/news/n0504/19supernova/>

MYSTERY OF EXTRASOLAR PLANETS' ECCENTRIC ORBITS

Except for the fact that we call it home, for centuries astronomers didn't have any particular reason to believe that our solar system was anything special in the universe. But, beginning with the discovery 10 years ago of the first planet outside our solar system, evidence suggests that, as far as planetary systems go, the solar system might be special indeed.

<http://spaceflightnow.com/news/n0504/19orbits/>

DARK PATCH ON SATURN'S MOON RHEA SEEN BY CASSINI

The ancient and battered surface of Saturn's moon Rhea shows a notable dark swath of territory near the eastern limb in this image from Cassini.

<http://spaceflightnow.com/cassini/050419patch.html>

SCIENTISTS THINK YOU'D BE "ROASTED" IN A BLACK HOLE

Contrary to established scientific thinking, you'd be roasted and not "spaghettified" if you stumbled into a supermassive black hole. New research presented at the Institute of Physics conference Physics 2005 took a new look at the diet of the universe's most intriguing object, black holes.

<http://spaceflightnow.com/news/n0504/17roasted/>

EARLY UNIVERSE WAS PACKED WITH MINI BLACK HOLE

A research group at Cambridge think that the universe might once have been packed full of tiny black holes. Dr Martin Haehnelt, a researcher in the group led by Astronomer Royal Martin Rees, presented new evidence to support this controversial idea at the Institute of Physics conference Physics 2005 in Warwick.

<http://spaceflightnow.com/news/n0504/16blackhole/>

Cont next page...

JOIN THE POVG NEWS GROUP

If you've got any news, information 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-unsubscribe@yahoogroups.com

To modify your subscription, visit the group website at: <http://au.groups.yahoo.com/mygroups>

PHASES OF THE MOON FOR 2005

New Moon	First Quarter	Full Moon	Last Quarter
			Jan 4 01:45
Jan 10 20:03	Jan 17 14:57	Jan 25 18:32	Feb 2 15:27
Feb 9 06:28	Feb 16 08:16	Feb 24 12:54	Mar 4 01:36
Mar 10 17:10	Mar 18 03:19	Mar 26 04:58	Apr 2 08:50
Apr 9 04:32	Apr 16 22:37	Apr 24 18:06	May 1 14:24
May 8 16:45	May 16 16:56	May 24 04:18	May 30 19:47
Jun 7 05:55	Jun 15 09:22	Jun 22 12:14	Jun 29 02:23
Jul 6 20:02	Jul 14 23:20	Jul 21 18:60	Jul 28 11:19
Aug 5 11:05	Aug 13 10:38	Aug 20 01:53	Aug 26 23:18
Sep 4 02:45	Sep 11 19:36	Sep 18 10:01	Sep 25 14:41
Oct 3 18:28	Oct 11 03:01	Oct 17 20:13	Oct 25 09:17
Nov 2 09:24	Nov 9 09:57	Nov 16 08:57	Nov 24 06:11
Dec 1 23:01	Dec 8 17:36	Dec 16 00:15	Dec 24 03:36
Dec 31 11:12			

<http://www.wa.gov.au/perthobs/hpc5mn03.htm>

PERTH OBSERVATORY VOLUNTEER GROUP INC.
MINUTES OF GENERAL MEETING
APRIL 4TH 2005

Present.

T.Beardsmore. D.Shearer. G.Lowe. J.Morris.
M.Freeman. A.Mcnaughton

J.Bell. E.Walker. A.Williams. L.Martin.
I.Baran. N.Townsend. J.Alcroft. M.Haslam.

N.Townsend. D.Alderson. T.Roberts.
R.Boelen. B.Harris. K.Ford. L.Robinson.

Apologies.

T. Beston. G.Coletti. V.Semmler. R.Loney.
K.Kotze. L.Bell. R.Tonelli. D.Emrich.

Confirmation of Minutes.

Moved J.Alcroft. Seconded L.Martin

Business Arising .

Nil

1. Amendments to the Constitution.

M.Freeman explained in detail the proposed changes and distributed copies of the changes to all members , in essence the alterations would enable the Volunteer Group to accept Donations or Bequests within the terms spelt out by the changes and enable the Donor to claim the donation as a Tax Deduction. The alterations to the Constitution must be forwarded to the Dept of Fair Trading for their approval. The Motion that the matter be put to the Vote was Moved by L.Martin. seconded B.Harris. The result was 15 in favour, none against.

General Business.

M.Freeman reported that he had attended a worthwhile meeting sponsored by C.A.L.M. and the Swan Trust on the raising of funds by groups such as ours, it was acknowledged that numbers attending the night tours would be down for this season, considerable discussion took place regarding advertising, promotion, and methods to encourage the public to visit their Observatory, N.Townsend stated that she had experience in writing Applications , and in putting out Press releases to local papers, and was quite willing to assist in this area, members were encouraged to take a quantity of promotional leaflets, that could be left at libraries or other suitable locations.

A.G.M.-Chairman's Report.

Chairman M.Freeman stated that his annual report was on the front page of the Newsletter, and briefly discussed the main items , he welcomed the new Volunteers, and thanked those members elected to the Committee for their work throughout the year, with special thanks to J.Alcroft for his efforts in producing the Newsletter every month.

J.Biggs also expressed the thanks of the Observatory for the work done by the Volunteer Group.

Treasurer's Report.

B.Harris stated that funds at the bank

remain unchanged from the previous month. He briefly outlined the various items of income and expenditure during the year, and stated that the accounts would be officially audited by the next meeting.

Nominations.

There had been no nominations received for the positions of Chairman ,Vice Chairman, Secretary. or Treasurer, and all the present office bearers were willing to sit for another year.

There being no further business the meeting closed at 8.25pm.

Next meeting will be on 9th May

SCIENTISTS TRACK COLLISION OF POWERFUL STELLAR WINDS

Astronomers have tracked the motion of a violent region where the powerful winds of two giant stars slam into each other. The collision region moves as the stars, part of a binary pair, orbit each other, and the precise measurement of its motion was the key to unlocking vital new information about the stars and their winds.

<http://spacelighnow.com/news/n0504/11winds/>

STRANGE NEW TYPE OF STAR CLUSTER FOUND IN ANDROMEDA

A U.K.-led team of astronomers has discovered a completely new type of star cluster around a neighboring galaxy. The new-found clusters contain hundreds of thousands of stars, a similar number to the so-called "globular" star clusters which have long been familiar to astronomers.

SOLUTION FOUND FOR GREAT PANCAKE MYSTERY?

Scientists may have solved a decades-old puzzle regarding the distribution of the eleven small satellite galaxies that surround the Milky Way. Cosmological theory predicts that these galaxies should occupy a large, nearly spherical halo but observations show that the satellite galaxies have a bizarre flattened, pancake-like distribution.

<http://spacelighnow.com/news/n0504/08mystery/>

PERTH OBSERVATORY VOLUNTEERS' GROUP

PERTH OBSERVATORY STAFF

Dr Jamie Biggs	Director and Govt Astronomer
Peter Birch	Astronomer
Ralph Martin	Astronomer
Dr Andrew Williams	Astronomer
Rick Tonello	Astronomer Assistant
Greg Lowe	Astronomer Assistant
Janet Bell	Administration Officer
Di Johns	Clerical Officer
Arie Vermeer	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	Newsletter Editor (contact: callides@iinet.net.au)

OBSERVATORY'S VOLUNTEERS' LIST

Jeff Alcroft	David Emrich	Rob Loney
Dick Alderson	Keith Ford	Andrew MacNaughtan
Trevor Beardsmore	Mike Freeman	Len Martin
Lyall Bell	Lynda Frewer	Jacquie Milner
Frank Bilki	Bevan Harris	John Morris
Tony Beston	Mark Haslam	Lloyd Robinson
Ric Boelen	Bert Hollebbon	Elaine Walker
Giuseppe Coletti	Karen Kotze	Matthew Zengerer

PROBATIONARY VOLLIES

ASHER ABRAHAM	GARTH BROOKS	NOREEN TOWNSEND
IRENEUSZ BARAN	TIM ROBERTS	ARCHIVING
GARRY BOYD	VAL SEMMLER	SALLY CULVER
JOHN BROOKE	DAVID SHEARER	

2005 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.

2005

30 May;

4 Jul;

1 Aug.



POVG

Perth Observatory Volunteers Group