Surprising the Public at National Parks - Barry Peckham

“Come look in the telescope and see where you were born!”

As far as we know, John Dobson was first to make a habit of setting up large telescopes for public viewing in America’s national parks. His rabid interest in cosmological consciousness-raising had combined with his abilities as a large mirror maker, teflon-smooth portable scope builder, resourceful dumpster diver and possessor of a mouth that runneth over with concepts, insights, anecdotes and questions. He saw in the national parks a place where dark skies collided with regular folks. From the streets of San Francisco, the Dobson gang took their sidewalk astronomy habit to Death Valley in winter-time pilgrimages. June forays to the Grand

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Upcoming Star Parties

Public Party  Aug  4  Dillingham
Club Party  Aug 11  Dillingham
Public Party  Aug 18  Kahala/Waikele
Club Party  Sep  8  Dillingham
Public Party  Sep 15  Dillingham
Public Party  Sep 22  Kahala/Waikele
Club Party  Oct  6  Dillingham

Upcoming Events:
- The next meeting is at 7:30 p.m. on Tuesday, Aug 7th at the Bishop Museum.
- Bishop Museum’s next planetarium show with Barry Peckham is Friday, Aug 3rd at 7:00 pm.

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President’s Message

There will be a total eclipse of the Moon on the night of August 27/28. Members of the Hawaiian Astronomical Society will be participating in an eclipse event at the Bishop Museum. I will be giving a talk that night about the history and future of human exploration of the Moon.

I had an opportunity recently to see a new documentary entitled “In the Shadow of the Moon.” The title and much of the film itself were taken from the words of the astronauts who have traveled there. Twenty-four men made that journey, three of them twice, and twelve of them landed there. Most of them are still alive, but as time takes its inevitable toll, that number will dwindle. The film gives viewers a little more insight into what it was like to be one of that select group of humans to visit another world.

NASA now plans to build a new launch system that will send humans back to the Moon. The plans call for a landing in 2018, but schedules have a way of slipping, especially when so much new equipment has yet to be built or even fully designed. It is not certain how many if any of the first men to walk on the Moon will be alive when the next person lands there.

Certainly the next group of lunar explorers will include women and will be otherwise as diverse as the astronaut corps has become in the shuttle era. Just looking back at the faces of the Apollo astronauts shows us that society has changed as much or more than technology since that time.

The new launch system will be, at least superficially, a throwback to the Apollo days, with the astronauts riding a capsule at the top of the rocket. However, they will come down on land, as the Soviets/Russians have always done, rather than in the ocean. The more important difference, however, is that this time, our goal is to permanently settle the Moon. Never again will we have to look back to the days when we used to fly to the Moon.

Chris
# Observer’s Notebook—August 2007

by Jay Wrathall

## Planets Close To the Moon

**Times are Hawaii Standard Time**

- **Aug 1, 14h,** M 1.8° NNW of Uranus (141° from sun in morning sky)
- **Aug 6, 18h,** M 6.3° NNW of Mars (74° from sun in morning sky)
- **Aug 21, 25h,** M 5.7° S of Jupiter (102° from sun in evening sky)
- **Aug 27, 00h,** M 1.3° SSE of Neptune (166° from sun in evening sky)
- **Aug 28, 21h,** M 1.7° NW of Uranus (168° from sun in morning sky)

Mercury, Venus and Saturn are closer than 15° from the sun when nearest the moon in August.

## Other Events of Interest

**Times are Hawaii Standard Time**

- **Aug 12,** 13:02h, Moon New
- **Aug 13,** Perseid meteors. (Most favorable major meteor shower this year.)
- **Aug 13,** 08h, Neptune at Opposition
- **Aug 15,** 10h, Mercury at superior conj. with sun (Passes into the evening sky)
- **Aug 17,** 18h, Venus at inferior conj. with sun (Passes into the morning sky)
- **Aug 21,** 13h, Saturn at conjunction with sun (Passes into morning sky)
- **Aug 28,** 00:36h, Moon Full

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### Planets in August

<table>
<thead>
<tr>
<th>Planet</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>♀ Mercury</strong></td>
<td>is too close to the sun to observe during the entire month of August.</td>
</tr>
<tr>
<td><strong>♀ Venus</strong></td>
<td>will be visible low in the west after sunset early in August and low in the east before sunrise late in August.</td>
</tr>
<tr>
<td><strong>♂ Mars</strong></td>
<td>rises about midnight and begins to brighten as it comes closer to opposition. Diameter 8” by month’s end.</td>
</tr>
<tr>
<td><strong>♃ Jupiter</strong></td>
<td>is the only bright planet visible in the evening sky and shines at mag. -2.4 in the southwest.</td>
</tr>
<tr>
<td><strong>♃ Saturn</strong></td>
<td>is too close to the sun to observe during the entire month of August.</td>
</tr>
<tr>
<td><strong>♄ Uranus</strong></td>
<td>rises about 8:30 pm. Can be viewed between Neptune and Mars in midnight hours.</td>
</tr>
<tr>
<td><strong>♃ Neptune</strong></td>
<td>reaches opposition this month so is in the sky all night. Best observed a couple of hours before and after midnight.</td>
</tr>
<tr>
<td><strong>♃ Dwarf Planet Pluto</strong></td>
<td>is still pretty well placed for viewing in the Sagittarius during the evening.</td>
</tr>
<tr>
<td><strong>♃ Dwarf Planet Ceres</strong></td>
<td>can be viewed in the midnight hours near Mars. At magnitude 7.8 it should be fairly easy to find. Ephemeris on the internet.</td>
</tr>
</tbody>
</table>
Meeting Minutes

President Chris Peterson called the July 3, 2007 meeting of the Hawaiian Astronomical Society to order at 7:38 p.m. The meeting was held at the Atherton Halau of the Bishop Museum. In attendance were twenty-three members and one visitor.

Upcoming Events - President Peterson reminded members that on July 16, 2007 will be “Lahaina Noon.” At 12:37 pm Honolulu time will be the moment when the Sun appears most directly overhead and at its most direct angle to the Earth. On June 21, the summer solstice, the sun was over the Tropic of Cancer. In July it passes over Hawaii on its way south to be directly over the equator on Sept. 21, the fall equinox, and over the Tropic of Capricorn on Dec. 21, the winter solstice. The sun returns to the equator on March 21, the spring equinox. It then passes over Hawaii again in late May on its way to the Tropic of Cancer.

It is hoped that members were able to view the conjunction of Venus and Saturn on June 30th, 2007. These two planets will continue to appear to travel near to one another in the evening sky for a few more weeks. In the meantime Jupiter is in prominence in the southeastern sky and will provide great viewing for the next few months.

Late evening Monday, August 27th and into the morning of Tuesday, August 28th, we will see a total eclipse of the moon. An event is slated for the Bishop Museum that evening, beginning at 9:30 pm on the 27th through 1:30 am the next morning. HAS star party coordinator Forrest Luke is looking for astronomers willing to help out at this event. If you are interested please contact Forrest Luke at 623-9830.

Star Party Report – There are no school star parties scheduled until October 2007.

Newcomers – Chris Peterson welcomed Dan Fullenwider. Dan is a former member from the 1970’s and is looking forward to becoming involved once again. He has a telescope and hopes to join us at upcoming events.

General Information- Carey Johnson spoke briefly about how to access and use the HAS Yahoo group site. More members are now making use of this tool for information and communication.

Night Sky Network – Night Sky Coordinator John Gallagher informed members of the next NASA teleconference, on July 18th, to be chaired by Dr. Lucy McFadden who will discuss the Dawn Mission. Should you be interested in any of the NASA Night Sky Network teleconferences please contact John.

Daytime Occultation – At 1:00 pm on July 17, Saturn will be occulted by the Moon. Although a daytime event, viewers can carefully view the event.

Iridium Blast- The membership took a bit of a detour outside at about 7:50 pm to view a mag -9 Iridium flare. The satellite flare delighted the members with a brilliant display as it moved towards the southwest.

Mainland Notes – Vice President Barry Peckham described events at the Grand Canyon North Rim and South Rim Star Parties. Barry traveled with John Dobson and Jane Houston-Jones & Morris “Mojo” Jones to not only the

(Continued on page 5)
(Continued from page 1)
Canyon were added to the park roster in the early ‘80s, but John Dobson never visited the North Rim until HAS members Jane & Mojo drove him there in June ’07. John told us many times how the flow of air into and out of the Canyon created good seeing conditions at the South Rim and bad conditions at the higher North Rim. This may be true, in general, but for the second year in a row we were delightfully surprised to find very steady air at the North Rim. Saturn remained rock solid as it sank into the Kaibab limestone.

And there were other benefits: the visitors and the main lodge are nested right at the edge of the abyss, featuring food, rest rooms, a large-windowed sun room where Dobson held court, and 2 stone patios where the largest scopes could be seen all day. Nightly talks were held in a grand hall and not out in the wind, as at the South Rim. Mojo and John each gave talks here.

The buzz from their presentations helped to increase traffic at the telescopes. The calm, not-too-cool night air enhanced temperaments in the lines of planet peekers. More than a dozen scopes serviced several hundred on the 2 nights we were there.

Jane made her Cassini presentation to guests at the Kaibab Lodge, 18 miles north of the North Rim, in the Kaibab National Forest. The 4 of us spent 3 nights at this collection of rustic cabins. Lodge guests got 2 astronomy presentations in the lobby and 2 dark sky scope shows at the edge of the vast meadow just outside.

During the lazy daytime hours Jane repaired and cleaned the manager’s 8” dob.

In contrast with Kaibab Lodge, the North Rim Lodge had no accessible treeless areas that weren’t lit. We scope wranglers were required to put up with local glare and severely segmented skies there on the edge of that grand drop-off. The big stone building blocked all telescopes on 2 sides. Worse still was the newly created national park paperwork,

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The Astronews

National Parks (Continued from page 4) forced upon the volunteer scope crew and the rangers who supervised activities. What made it worthwhile was the steady air, the pleasantly surprised people, and (for most scopes) a gallery view of the southern sky, “starring” Jupiter.

So we put in 3 nights worth of public astronomy in Northern Arizona and then crossed the border into southern Utah for 3 nights at the Bryce Canyon Astronomy Festival, for which John Dobson was keynote speaker. Chad Moore (pictured at right with Jane), formerly of HAS is a park ranger and “dark ranger” leading the charge toward dark skies and public astronomy in this national park. The event, in its 7th year, is very well orchestrated and limited to 45 telescopes with a chalked triangle for each. All scope wranglers had to attend a 2 hour briefing and although I dreaded it, each segment impressed me as thoughtful, well-presented and useful. Dobson sat through the session like a silent heckler. His style of bonding with the universe prefers a minimum of governmental qualifications. Thin air notwithstanding, Dobson kept a steady stream of jokes and anecdotes flowing in the lodges’ lobbies and scope fields, animating his cosmological concepts with agitated expletives and girlish giggles. His longstanding mission is to bring together science and religion so that both warring parties can sit in the same room and discuss the same universe. Few religious or science people listen to his ideas. None of his listeners seem capable of addressing his issues. They just like to watch his performance. “Look in the telescope,” Dobson shouts, “and see what you are made of!”

Minutes (Continued from page 4) Grand Canyon Star Parties but also to the Bryce Canyon Star Party. Pictures of the buildings, the general layout, and descriptions of some of the events and discussions held during the star parties gave everyone a bit of the flavor of time spent in the Southwest. Barry’s report painted a rather glowing picture of the Utah festivities, which were coordinated by former HAS member, now national park ranger, Chris Moore. Moore is an avid amateur astronomer and self-proclaimed “Dark Sky Ranger” and his planning of the event was completed with quality viewing in mind.

Barry displayed his most recently completed 12.5” Litebox scope.

Mike Morrow, over from the Big Island, joined us and caught us up on the weather and events on that island. The meeting was adjourned at 8:58 p.m. and refreshments were served.

Respectfully Submitted,
Gretchen West
Treasurer’s Report


Initial Balance: ................................................................. $5,383.96

Receipts:
  Dues Received............................................................. 63.00
Total Income: ............................................................... $63.00

Expenses:
  Astronews ................................................................. 155.26
  Astronews (June printing) ............................................. 76.20
  Astronomical League Dues ......................................... 695.00
  Excise Tax ................................................................. 4.05
  Magazine Subscriptions .............................................. 99.90
  Refreshments ............................................................. 5.71
  Mailing Labels .......................................................... 30.25
Total Expenses: ........................................................... $1,003.37

Ending Balance: ............................................................ $4,380.59

This month our membership remains unchanged. Thanks those renewing this month. Clear skies to all!

Meteor Log—August 2007

This is Perseid month. Also sporadic rates are rising. There is no Moon for the Perseids so all we need is clear skies. There are several small showers which produce less than 3 meteor an hour and the Moon spoils most of them so we will skip them.

Monday the 13th, the Perseids. Radiant 03h04m +57 degrees. The maximum is predicted from 05 hours to 7 hours 30 minutes, but all night will be good. Rates run up to about 80 meteors an hour. It is possible a not traditional maximum may occur on the night of the 12th. The best location for observing the maximum is North, Central and northern South America. The radiant, a few degrees north east of the Perseus Double Cluster on August 13, reaches a usable elevation around 10 to 11 o'clock local time. Perseids are fast, often bright, and frequently leave persistent trains.

If you are interested in observing meteors contact Tom Giguere on Oahu at 672-6677 or write to:
Mike Morrow, P.O. Box 6692, Ocean View, Hawaii 96737
Preparing for a star party at Dillingham Field

(Photos by club member Carey Johnson)