



From the President

By President Doug Brown

If there were one word to describe FPOA's 2009, without a doubt it would be "instability". Not that the organization is unstable, but our arrangement with the park has been unstable — which is a product of Sacramento's inability to balance the budget and focus on the basic roles of government. Since last winter, we've been running on month-to-month extensions of our concession contract which the Department of Parks and Recreation could not renegotiate, because of the budget crisis. Then last spring we received word that the park might close, only to later have the decision delayed to September. Finally, in August we were asked to commit \$100k by Labor Day or face potential closure.

The response on the part of our members and the public we serve was a testimony to the value FPOA members provide to the community. A surprising number of members pledged significant funding, if needed. Community officials offered support and a variety of fallback options in case the park closed. Several members stepped forward to help handle the increased Board workload. Hartnell College offered a possible collaboration. Many people communicated their feelings to the legislature through our huge Save the Park event, personal contacts, letters, petitions, and testimony at legislative hearings. Combined with similar efforts state-wide, the message got through, and the Governor has now announced that no parks will close *completely*. That does not mean we are out of the woods; yet-to-be-announced service cuts and schedule reductions could still impact our operation. Nevertheless, the severity of the potential impact now has an upper bound.

Besides facilitating communication to Sacramento, the Board has been busy looking at numerous backup options.

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FPOA Programs 2009

Saturday Evening Programs

Oct 10, 17, 24

Solar Programs

Oct 17

Board Meetings

Oct 17

Nov 14

Please check <http://www.fpoa.net/schedule.html> for changes or updates to this schedule.

Public to Sacramento: Save The Park!

from our State Capitol Bureau

A huge crowd, larger than any Star-B-Que on record, turned out in mid-August to send a strong message to our Legislators in Sacramento and the State Department of Parks and Recreation that Fremont Peak is a critical community resource. Speakers described the importance of FPOA and the park to public education, student career choices, and scientific research, and provided recommendations on how to make our voices heard. Two poster-sized appeals to the State Legislature were signed by some 200 people and sent with petitions containing hundreds more signatures gathered by **Sam Sweiss**, of Scope City. Speakers included:

Doug Brown - President, Fremont Peak Observatory Association; **JR Dela Rosa** - Field Representative, Office of State Assembly member Anna Caballero; **Eddie Guaracha** - Superintendant, California Dept Parks & Recreation Gavilan Sector;

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Basking in Serendipity's Glow

by Donn Mukensnoble

Hale Pohaku, the mid-level facility serving the Mauna Kea Observatories, has its own peculiar rhythm; part college study hall, part bus station, and part class reunion. On July 19, something was different as I walked into the dining hall before my night on the summit. There were more clusters of observers and several people were on the phone or hunched over laptops.

The telescope operator for the IRTF 3 meter instrument, Bill (William) Golisch, sat down across from me, a slight smile on his face.

"Looks like it's going to be a busy night."

I just looked up at him, my silence framing the question.

"There's a spot on Jupiter. A new one. Some guy in Australia imaged it."

"Wow," I mumbled back, in mid-mouthful. My mind raced back to when the remains of a comet slammed into the giant planet, leaving bruises in the Jovian cloud-tops that were as large as the Earth.

"Anyone know what it is?"

"Not really. Weather's been lousy in Europe and the mainland. We may be the first ones to get a good look at it." Orton just happens to be on tonight. Bill's smile was larger.

That explained the electric tension I had felt earlier. Schedules were changing and telescope time was being bartered. Normally observing time on the big telescopes was allocated by committees months in advance. But when something unexpected appears, then the 'target of opportunity' can take precedence. An earth-sized blot was just one of those events. It seemed like a lot of people would be busy tonight.

We drove up the mountain, talking about the possibilities of what might be going on there; some of the blogs and tweets were calling it "just a storm" and nothing special to get worked up about. Besides, it was space week and there were the recollections of the first moon landing in 1969 to occupy most of the Sci/Tech/Space news

The sky wasn't the greatest; high cirrus mixed with lower-level stratus that we left below as the gravel road wound its way up past the tree line into the cold Aeolian desert above 12,000 feet. Outside, the red soil and randomly strewn boulder looked like the surface of Mars. I picked out the cinder cone known

to Hawaiians as Pu'u Lilinoi (the goddess of the mists and fog) and mentally sent her a prayer to spend her night quietly. Most of the times, she listened. Would tonight be one of them?

Early evening, before the sun set, was spent getting the telescope ready for the night: turning off the air chillers and floor cooling, filling the open-circuit cryogenics, opening the shutters and protective windows, starting up the software that drove the telescope and the four instruments that were available for use via a quick-change system of roller tracks and flex cables. We'd start the night with SpeX, the workhorse combination spectrograph and camera. By good luck, one of the observers had planned on using MIRSI, an older but still valuable imager that used liquid helium in addition to the more usual LN2 (nitrogen) to cool the sensitive infrared detectors to near absolute zero. There was a large, squat Dewar sitting on the access platform that normally wasn't there. LHe is so cold that when it sprays into the open air, it first liquefies the oxygen before evaporating into an oddly thick cloud of vapor. Bill handled that task while I listened for the first observer calling in.

First half of the night was anticlimactic, save for the threatening clouds and uneven humidity. Lilinoi was restless; when the trade winds are strong, they can blow clouds and fog up from the lower elevations regardless of what the weather forecast says is supposed to be going on. We've even had snow in August if conditions were right. I hoped again it wasn't going to be one of those nights.

Telescope turnover occurred right around midnight and Glenn Orton's team took over. Bill had called him "Mister Jupiter" and that moniker was right on target since Professor Orton had headed the Shoemaker-Levy-9 (SL-9) observation team back in 1994 and knew about as much as anyone about cometary impacts on gas giant planets. The discoverer of this latest feature, Anthony Wesley, was also on the conference line from Australia. Our timing was just about spot-on. The suspected spot on Jupiter was coming into view just as the clouds began to thin. Not that a few clouds were much of a problem in infrared. The same penetrating power that allows astronomers to peer deep into interstellar clouds also worked on the more mundane terrestrial ones. As an added bonus, the "seeing" hovered around 1/2 an arc-second, which is extremely good in any other

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We've worked throughout with Gavilan Sector Superintendent Eddie Guaracha to explore a number of collaborative solutions to the problem. Fortunately, thinking that service cuts such as the Governor announced might become a possibility, we've already provided him implementation plans for continued operation under several possible cutback scenarios. Although Fremont Peak State Park would be a preferred location for our operation if we can arrange a stable agreement with the DPR, the Board recognizes we might need to move, and has already performed a number of site surveys and held discussions to explore access to some promising sites.

Looking back, much has been learned from the experience. Many people have now come to know the existence of FPOA and the value we provide. We've realized the importance of maintaining good contacts and visibility with community and DPR leaders. We now know there are other locations which would welcome us. Most importantly, many of us have realized that we feel the same about Fremont Peak as one member who confided to me, "You know, I really love that place!"

Save The Park!

From page 1

Anthony Botelho - Chair, San Benito County Board of Supervisors, President, Monterey Bay Area Governments, Chair, San Benito County Council of Governments; **Priscilla Hill** - Member, City of San Juan Bautista City Council; **Eugenia Sanchez** - Mayor, City of Hollister; **Reb Manaco** - member, San Benito County Board of Supervisors; **Adam Medeiros** - Intern, Hartnell College, **Andy Newton** - Director, Hartnell College Planetarium and Development Office; **Dr. Pimol Moth** - Instructor, Hartnell College Department of Astronomy; **Dr. Peter Jenniskens** - Research Scientist, Carl Sagan Center at the SETI Institute, NASA/Ames Research Center; **Dr. Jüergen Wolf** - Sr. Research Scientist, Stratospheric Observatory for Infrared Astronomy (SOFIA), Deutsches SOFIA Institut DSI, NASA Ames Research Center; **Steve Loos** - Member, Peak Observatory Association.

location, but fairly common on Mauna Kea. We'd get a very good view.

Like most modern telescopes, astronomers don't actually look into eyepieces much anymore; the photons from Jupiter were captured by SpeX, filtered, counted, and turned into an image on a computer monitor. And what an image it was! Chills ran down my spine as we gazed at an oblong streak on the distant planet that glowed white with heat energy. That was no storm...

Over the speakerphone, Orton was overjoyed: "Definitely an impact!" he exclaimed as the next frame came up, clearer than the first. Some structure in the blemish could be seen. He switched filters to pick out a different wavelength, which came from another elevation in the Jovian clouds, alternately taking spectra to capture this once-in-a-lifetime event for the second time. It was like SL-9 all over again.

Minutes flew by, then the observers asked to switch instruments, putting the MIRS camera online. With some telescopes, instrument changes are a slow, painstaking effort; the rail guides on the IRTF allowed a relatively quick changeover in twenty minutes or so. But tonight, every minute counted as the massive telescope slewed to zenith for the change. Bill flew through the swap in record time, rolling SpeX away and MIRS into place, then securing the bolts that held the massive detector in place while the Jupiter team prepared their observing plans. MIRS showed the splotch in literally a different light as the fast-moving planet rotated. The impact site was now on the central meridian. The observing window was half over.

Soon the request came to change instruments again and MIRS was replaced by NSFCAM2, another image covering still another wavelength range. The data was piling up. I watched for more news on the web, but nothing new had been posted, yet (later I'd find out that a few hundred yards away, one of the 10-meter Keck telescopes was also imaging Jupiter). The next day, JPL and NASA posted the confirming impact observations from IRTF while the news of the event circled our globe. (<http://www.jpl.nasa.gov/news/news.cfm?release=2009-112>)

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SBQ Speaker Has Big Impact!

By Doug Brown

• **Brian Day**, FPOA's 2009 Star-B-Que keynote speaker, described the LCROSS mission timeline, experiments, and technology, leading up to next week's big lunar impact. Brian masterfully timed his presentation to climax with a brilliant, nearly-overhead pass of the ISS with Shuttle, after which he hosted an in-depth observers workshop.

Just before Brian's talk, excitement built as **Sam Weiss** of Scope City announced winners of this year's raffle. Both of the grand prizes were perfectly suited to the winners: six-year-old **Gavin Bell** was awarded the Orion StarSeeker 80 mm GoTo refractor telescope by John Parker of Orion while eleven-year-old **Rosie Hudson**, our youngest certified *Challenger*



user, was awarded a CelestronNexStar 6 SE by Sam Weiss, of Scope City .



Rosie was so excited she was even rumored to have offered to share it with her older sister. The raffle prizes were quite substantial, thanks to the generosity of Sam, **John Parker** and **Dave Talomas** (Orion), **Kerry Sheblet**(Farpoint), **Hans Wiest** (1800Destiny), **Tim DeBenedictus**(Carina SW), **Sam Weiss** (Lumicon), and **Sam Weiss** (Park Optical). Please pay them a visit the next time you are shopping for equipment

Congratulations go to **Mike Koop** for his non-trivial accomplishment of correctly answering more of **Pat Donnelly's** diabolical Astronomical Trivia Quiz questions than any other of the many astronomy-savvy attendees.

Picnickers enjoyed a large crop of creative, tasty, entries for the Astronomical-Gastronomical contest: Grand Prize—*Gobbler Cluster* (berry cobbler), **Cathy Fuller**; Current Events—*Jupiter Asteroid Strike* (apricot sour cream pie), **Mary Schneider**; Most Potential—*Cryovolcanism Cake* (dry ice injected into chocolate cake), **Mike Connally**; Solar—*Brightest Asteroids from Earth* (albedo-correct chocolate truffles), **Mary Allen**; Honorable Mentions—*One Small Bite for Man*, **Janine Flagg**, **CMB WMAP**, **Paul Kohmiller**, *Apollo 11 Landing Lunar Samples*, **Hannah Hudson**, *The Planets*, **Randy Josan** (?), *Cosmic Raisin Bread*, **Chris Angelos**, *Black Hole*, **Black (Bob)**, *Martian Polar Ice Cap Pie*-anon.

FPOA recognized two members for their contributions. **Ron Dammann** received a Lifetime Achievement Award for his tireless contributions to FPOA's mission, and **Rob Hawley** was awarded 2009 Volunteer of the Year for his contributions to public programs.

The Star-B-Que is FPOA's annual meeting, at which members re-elected **Rick Morales**, **Dave Samuels**, and **Loren Dynneson** to new three-year terms on the Board of Directors. Thanks to **Ron Dammann** for running the election.

All the kids and their parents are grateful to **Suzie Gurton** and **Ed Huston** for making the Kidz Korner lots of fun and educational, too.

Our stomachs appreciate the efforts of **Loren Dynneson** , **Mark Levine** and **Ed Huston** for organizing all the food. Finally, thanks to the **Hartnell Interns** for helping throughout the event.

FIRE AT FREMONT PEAK

SBQ Activities

by Bob Black

Suzy Gurton in the Kidz Korner.

Fremont Peak State Park, 10:30 am, Sunday, July 26.

Ranger Derek Davis drove by my campsite, #14, warning me that there was a fire farther back on Oak Point campground. About then two fire trucks sped up to Oak Point. I moved my car to the parking lot. Most everybody had already left, but four families with several small children were just returning from a walk and were heading for their Oak Point campsites. I asked them to stay at the parking lot. However the men hurried to recover their cars, and were successful. About that time a helicopter flew over dropping borate. All of us and our stuff got well borated. Two women helped me move my 10 inch Dobsonian 'scope to the parking lot; we worked fast as the smoke indicated that the fire was rapidly approaching my campsite. Then the women gathered the children under the trees at the picnic area, which was good because within minutes a helicopter landed on the parking lot, offloaded a fire fighting crew, and took off. Just a few minutes later we could see flames moving toward campsite #17. The fire seemed to be confined to the grass, and not involving trees. Ranger Derek came by and requested that we relocate to the southwest parking lot so that we would be farther from the fire. We did so and stayed until Ranger Derek gave us the all clear. The helicopter had blown my 'scope over when it landed, badly damaging the tube. The firefighters stopped the fire at about campsite #17, so my camping gear was saved. I believe that they saved the other campers' gear, too. It seemed that the firefighters suppressed the fire in minutes, and then spent about an hour on hot spots and repacking their gear. We all bundled our stuff up and headed for home. I dropped my 'scope off at Orion, Cupertino to be repaired. The kids' behavior really impressed me; they were very orderly throughout.



For more images of the event :

<http://fpoastarbq2009.shutterfly.com>

Before we knew it, the impact site had passed around the edge of the planet and our window of opportunity had passed. The observers collected calibration images and sky "flats" as the dawn twilight began to brighten the sky to the east in what would turn out to be a gorgeous red-gold sunrise. It was now the 20th of July, 40 years to the day since mankind first stepped on the Moon and almost 15 years since the SL-9 event. Bill closed up at 6am, tired but very satisfied with a job well done. I, for one, was happy and incredibly lucky just to be there!

Postscript: 19-Sep-09, two months later at almost the same time of night, Jupiter was once more being observed with SpeX at IRTF; the impact site was still visible in the infrared even though it had faded visually. The conjecture now is that a small comet was the impactor.

Challenger Telescope Certification Class

By Ron Dammann

FPOA members who would like to become Certified to use the Challenger 30" telescope should contact Ron Dammann at schedule@fpoa.net and provide a number of Saturday afternoons in October and November that they would be available for a 3 hour training class. Classes will be scheduled to provide training to groups of four to six members at a time.

EMAIL DELIVERY OF THE OBSERVER

Dear FPOA Members,
We have been delivering the Observer via email for the past several issues. This obviously saves the Association postal expenses, and assures the quickest delivery to you. However, several of you no longer have valid email addresses, due to ISP changes, moves, etc. If you would like to continue to receive, or begin to receive, notification of the Observer via email, please send your current email address to schedule@fpoa.net

Fremont Peak Observatory Association
PO Box 1376, San Juan Bautista, Ca. 95045

Officers and Directors—2009

President: Doug Brown 408-314-2844
prez@fpoa.net

Vice President: Dave Samuels
samuels_david@emc.com

Secretary: Mark Levine 831-262-2831
tatamark@razzolink.com

Treasurer: Rick Morales 408-804-3374
rickmorales@charter.net

Directors: Donn Mukensnoble 808-885-0739
dmuk@hawaii.rr.com

Pat Donnelly 864-885-4015
pmdonnelly@duke-energy.com

Loren Dynneson 831-443-8631

Ed Huston 831-636-3898
ed.huston@ngc.com

Dir. of Instruments: Ron Dammann 408-255-1863
ron.dammann@lmco.com

Membership & Newsletter Distrib.: Bob Black 650-592-2166
bob-black@comcast.net

Directors Emeritus: Kevin Medlock
Denni Medlock
epoch@majornet.com

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FPOA on the Internet

Phone Number: 831-623-2465
Email Address: info@fpoa.net
Website: www.fpoa.net
Members Only Page: members.fpoa.net
Members List Signup: <http://fpoa.net/mailman/listinfo/fpoa-members>