



The Fremont Peak **OBSERVER**

Promoting public education in Astronomy

December 1989

Volume V No. 4

President's Message

1989 was a very good year for our Association. We reached over 2,000 members of the non-astronomical public, and opened their eyes to the wonders of the universe overhead. Our own Association increased its membership roll by over 15%, to 175 members.

As we enter our 6th year of existence though, we must guard against complacency. While we have come a long way, there is still much to do: we need to put together a "docent" training program and a catalog of programs that can be given on a moments notice. We need to improve our media and publicity skills, to become more well-known in the community. We need to increase membership involvement in our public activities. We need to keep our technical resources up to date. The list goes on...

During the coming year we expect to be able to increase the frequency of publication of this newsletter to bi-monthly during the months we are open (May through October). We will be able to do this without raising our annual dues. Fund-raising willing, we will also begin a solar observing program. And we also plan to begin computerization of the 30-inch.

Leading the Association through the rapid growth of the past several years has been a personally

rewarding experience, and I enjoy the support you have given me. I wish you all a safe holiday season, and look forward to working with you again in 1990!

Frank D'Amico

FPOA 1990 Schedule

Apr 28	Astronomy Day and Open House
May 19	Public Program
Jun 2	Public Program
Jun 16	Public Program
Jun 30	Public Program
Jul 14	Public Program
Jul 28	Public Program
Aug 11	Public Program
Aug 18	Annual Meeting and Star B Q
Aug 25	Public Program
Sep 8	Public Program
Sep 22	Public Program
Oct 13	Public Program
Oct 27	Public Program

NOTE: Public program topics to be determined. Each program begins around dusk, and lasts about 30-45 minutes. Viewing through the 30-inch scope follows the program.

It's not too early to sign up to volunteer for a public program (*see 1990 Schedule*). We need one person who will be responsible for giving the talk, and a minimum of two people to operate the 30-inch scope for each program. So avoid the rush and sign up now by calling Rick at 408-623-4255.

From the Department of Parks and Recreation...

I would like to thank all those people who volunteered this past year to help make our public programs a success. I can't begin to name them all, and if I were to attempt to do so, there would be someone whose name I forgot, and I don't wish to offend anyone because of my lapse of memory. We couldn't have done it without you!

During the coming year I will be personally working to complete the FPOA Volunteer Training Manual, which will become the basis for formalized FPOA "docent" training. My goal is to involve, initially, about 10 volunteers. Each of these volunteers will be responsible for giving a talk to the public on an astronomical subject of their choice. I would like to have this complete in time for our 1990 Public Program season. If you would like to be part of this training program, and you would enjoy getting up in front of an audience for 30 to 45 minutes, please give me a call at 408-623-4255.

-Rick Morales, Executive Secretary, FPOA

Letters To the Editor

(Ed note: from time to time I receive letters which are either witty enough, or have enough general interest to warrant publishing. I hope you enjoy Jay's "rapier-like" wit as much as I!)

Dear Editor,

I am pleased to be runner-up for the "No One's Gonna Believe Me But..." award, but in fairness must point out that Frank Dibbell should at least tie for first place, for agreeing that (Stephan's Quintet) was there. Or perhaps there should be a separate prize for Astronomical gullibility!

John Gleason's observation is intriguing: the angular diameters of the Galilean moons, when Jupiter is at opposition, run from 1.0 to 1.7 arc

seconds. A C-14 has a resolution element of about 0.35 arc second; the FPOA 30-inch about 0.17 arc second. Clearly, either instrument could detect very coarse, high-contrast detail on a Galilean satellite. If memory serves, the main problem with seeing detail on these moons is more likely the lack of high-contrast detail, and not the lack of resolving power. There certainly is detail on these moons visible from Earth: a friend once reported a broad band across Ganymede (when observing at the Coude focus of the 3-meter at Mount Hamilton).

Look at it another way: Jupiter's diameter is about 25 times Ganymede's. Observing Ganymede with the 30-inch at 1000x is like looking at Jupiter with a 30mm spotting scope at 40x. The spotting scope might show the Red Spot, and perhaps even a belt or two. If so, the 30-inch should show comparably proportioned detail of similar contrast on Ganymede. A C-14 would be twice as hard-pressed to do so.

But if John was observing with a Questar 3.5, I'd say he can keep the award with a clean conscience!

Sincerely,
Jay Reynolds Freeman

About the FPOA Log

"From the Log" contains excerpts from the FPOA 30-inch Log Book, which occupies a spot on the table in the Observing Room. The range of its ever changing entries reflect the variety of styles of FPOA members as they enter their individual observing experiences. Some choose only to write a few terse lines to record their night on the 30-inch (perhaps unwilling to see their experiences show up in this column?). Others write volumes, interpreting their feelings about what they've seen as well as documenting the fact that they've seen it. Included also in its pages are a history of our public programs,

special events, and how many people have actually looked through the scope on a given night. This single book forms the greatest history text and diary that the FPOA could ever have. Scanning through its pages will propel you on a trip through the universe as observed from Fremont Peak, with bats, rats, cats, and an occasional earthquake along the way!

The FPOA also uses the logbook to extract statistics on the 30-inch scope's use. Did you know that over 2,500 people had the opportunity to view the heavens from the Peak during the course of the 14 official programs put on in 1989 by the FPOA? Did you also know that the scope was in use 91 evenings between January 1st 1989 and October 28th (the day the mirror was removed)? This works out to 9 evenings a month, or three evenings a week, discounting one week for the full moon!

And for those of you who have been calling the Medlock residence pleading to have the 30-inch mirror back, take heart! The 30-inch was cored successfully last month. Kevin is presently building a new mirror support, and plans to have the 30-inch operational again by the end of January (he *has* to! The impatient observers might begin to picket his house!).

Kevin and I want to thank you all for your support, and we wish all of you a happy and safe holiday, and a happy New (observing) Year!

-Denni Medlock, Treasurer, FPOA

From The Log...

May 31

Bill Dilliges here (alone!). Ah, it's all mine!!!
20:30PDT opened observatory. Beautiful day, warm. High pressure offshore, should be a good night. No fog, no clouds.

21:36PDT M65 and M66 in Leo to get my "feet wet". First time on this scope. While looking at zenith saw two satellites cross bowl of Big Dipper with naked eye.

22:16PDT Taking my time getting used to this monster. Moving this thing around in RA and DEC while observing can be tricky trying to figure out which way to push and pull for direction you need to go. Usually one axis is difficult to get response. Hermit time. Cranking roof back was quite a job, too! NGC4038, Ring Tail galaxies in Corvus found with 40mm. Looks bigger and better with the Nagler 20mm. Think maybe I'll just try staying with it, seems to do a great job. What next?

22:53PDT M51. Wow! I've never seen spiral structure as well as this in thirty years of observing. This is a knockout object in this scope. Almost passed out with delight viewing this beauty.

I must see M13. Hope it doesn't give me heart failure. I'll be back - I hope.

23:32PDT M13 (20mm 183x) Very nice. I didn't die, but almost. Looks like M11 as seen in a C14. Very bright. Stars all over the place. Resolved to the core, needless to say.

01:32PDT M27 WOW! Dumbell Nebula. Fantastic! Just like the photographs. Structure all the way around, not just the dense "dumbell" part. Aperture really brings these deep sky objects home. Too bad the price you pay for this aperture is a thousand tons of steel and glass (HA HA).

03:20PDT M31 Lots of light! Field too small. Couldn't see arms. Good night! My back will never be the same.

June 4

19:00PDT Opened to measure eyepiece tubes for film holder. Jim Powell.

June 12

Opened observatory at dusk. Serious observing had to await dessert. Oh, all right busybody, it was strawberry ice cream. Played celestial tourist until 1AM. Saturn's moons easy at full

RENEWALS COMING DUE!

Well, it's that time of year again. Next month is our annual Membership Renewal drive. As you know, membership in the FPOA runs the calendar year, from January 1st through December 31st. The month of January is devoted to membership renewal processing; sometime during the first week of January you should receive your membership renewal form (unless you are a Life Member, in which case renewal doesn't apply!).

You can help us out, though, if you wish to mail in your renewal early. The FPOA saves about 60 cents in administrative processing costs for each renewal received before January 1st. Put another way: for every 40 people who renew early the FPOA can use the money saved to purchase either a video for our film library or four slide sets for our presentation library. And keep in mind that your membership fee (less the cost of the newsletter - about \$3.00 per year) is tax-deductible.

If you wish to help out by mailing your renewal in early, send your check or money order, made out to *FPOA Renewal*, to

FPOA Membership Renewal
P.O. Box 1110
San Juan Bautista, CA 95045

1990 renewal rates are as follows: \$10.00 for general membership, \$30.00 for contributing membership, and \$50.00 for sustaining membership. If you wish to convert your membership to Life, the cost is \$300.00 (\$270.00 for people over 60).

Thank you for your continued support!

From the Log, continued...

aperture. The night was actually clear! I can stop shaking now. This fix should last a week or two.

Dave and Mary Ambrose

June 13

23:11PDT Observed Moon, M4, M13, Saturn. The sky is clear and warm. Jim Powell.

June 21

23:10PDT Observed Moon, Saturn, M4. Photographed Moon, Saturn. The VCR is gone? Jim Powell.

June 23

The VCR is being used by park staff in San Juan Bautista. Rick Morales.



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The *Fremont Peak Observer* is published quarterly, and is the official publication of the Fremont Peak Observatory Association. The Association is a tax-exempt, not for profit organization dedicated to providing public education and interpretive services in Astronomy using the resources available at Fremont Peak State Park.

Basic membership in the Association is \$10.00 per year, plus a one-time \$10.00 initiation fee. Membership runs for the calendar year; there is no pro-rationing of dues. For more information, write to:

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