



# The Fremont Peak **OBSERVER**

Promoting public education in Astronomy

March 1992

Volume VIII No. 1

## 1992 Events Calendar

May	9	Astronomy Day
May	23	Public Program
May	30	Star Party
June	6	Public Program
June	20	Public Program
June	27	Star Party
July	4	Public Program
July	18	Cosmocon Star Party
July	25	Public Program
Aug	1	FPOA Annual Meeting
Aug	8	Public Program (Perseids)
Aug	22	Public Program
Aug	29	Star Party
Sept	5	Public Program
Sept	19	Public Program
Sept	26	Star Party
Oct	3	Public Program
Oct	17	Public Program
Oct	24	Star Party

## Volunteers!

The Association needs volunteers to help with minor Observatory maintenance before our public programs begin this May. We will be having work parties most New Moon weekends between now and May 9th. Call Rick to volunteer!

### Medlock's Win Gavilan District Volunteer Award

see details on page 4

## Time To Renew!

Have you turned in your FPOA Membership Renewal yet? 1992 renewal dues are only \$10.00. Your tax-deductible dues help us pay for educational materials for our public programs as well as defray our administrative costs. If you can't remember whether or not you renewed your membership, look at the number in the upper right hand corner of the address label on the envelope this newsletter came in. If it says "1991", then you have not yet renewed, and this will be your last newsletter. (If it says "9999", it means you are a life member, so you can ignore this!) If it says "1992", then you are OK!

Won't you take a moment now to write that check?

Send your check, made out to "FPOA Renewal", to:

Frank Dibbell, *FPOA Renewal*  
10281 Parlett Place  
Cupertino, CA 95014

Also, indicate whether you want your name and number included in the Membership Directory (to be published in June).

## In This Issue...

- The Presidential Papers..... 2**  
*This article by long time FPOA member Jack Zeiders beholds the beauty of the winter night sky*
- Computing The Age of the Moon..... 3**  
*A simple spreadsheet function macro for calculating the age of the moon in days past "new"*
- Certification Classes Begin in May..... 3**  
*If you have been certified to operate the 30-inch scope in the past, you'll need to be re-certified*

# The Presidential Papers

by Jack Zeiders

Last month I went up to Fremont Peak a couple of times. I was surprised at how few wintertime astronomers there are anymore. One evening I had the park all to myself. Another night there were three of us maniacs. The winter skies can be quite spectacular. One Saturday night while Dave Barosso was setting up to do some observing with the 30" reflector, I casually asked if there would be any major objection to me mooching some photons. Well, he gave in and I moved in. This turned out to be quite an evening. Early on while we were waiting for it to get really dark, I wanted to look at Gamma Andromeda. Dave, who is in the process of observing every object listed in the entire NGC catalog, tolerated me and my proclivity for looking at big bright easy stuff, but only till the seeing got good and he could get on with his observing program. (Little did he know what evil lurks within!) The air was good and Dave had collimated the scope that day so the images looked pretty good. There was some glare off the primary orange star so I stopped it down to 11 inches with the off-axis stop. The blue secondary was a pretty ball, no diffraction rings but it was not boiling; actually it was pretty steady. Maybe some more magnification would be interesting.

The 9mm Nagler seemed to do the trick; more power really shows the colors of bright stars well when the air is steady. Dave begrudgingly went up and took a look, "Yep that's nice," and back to his book. While sitting up on the ladder I thought there was a separation in the blue secondary on one side (out of habit I always look for the tertiary, a dimmer green star off the secondary). I had never seen it before but had read about it, 1/2 arc second separation the books had claimed. Well there seemed to be a third star poking itself into the field from time to time and always in the same place. I have seen turbulent air scatter light into a false image many times before but those usually appear randomly around the real star.

This one was always in the same spot. Pat Donnelly was working out in front of the observatory with his C-8. I invited him up for a look-see as he is an avid double/multiple star observer. After looking a bit he also made the usual comments about how nice a pair they were, but no mention of the tertiary. I asked him to take another look, as that usually triggers a thought of something being afoot. After several long moments he mentions the secondary being elongated and at times being a separate image. After more study all three of us agree it is there, in the right position, color and magnitude. Seems we finally resolved Gamma Andromeda into a triple!

Later that evening I wanted to look at M-42, the Orion Nebula. Well as we had been working over a bunch of faint fuzzies (dim galaxies) Dave didn't object strenuously. So I swung the scope over and took a peek: nice, VERY NICE! Out of curiosity we decided to see what effect the various Lumicon filters would have. The UHC turns the Trapezium stars turquoise, yuck! The O-3 filters made them green and red, garish; I prefer the normal unfiltered version. The seeing still seemed fairly good as the detail of the inner region was very clear. Trying both the Meade 14mm ultrawide, a Nagler-type large heavy eyepiece, and the Nagler 9mm rewarded us with wonderful vistas! The Meade gives moderate power with good eye relief without the kidney bean shadows the old Nagler 13mm had. It has become my favorite eyepiece. Eventually we found 5-6 very faint stars in the Trapezium area in addition to the normal 6 bright stars. We observed and logged other objects on a wonderful winter evening. I strongly urge you to break out the winter clothes and try the winter sky!

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## COSMOCON 92

A joint convention hosted by the  
AANC celebrating the excitement,  
wonder, and spirit of discovery  
in Astronomy.

Cohosted by San Jose State University

July 13-18, 1992

(see page 4 for more info)

# The Age of the Moon

by Frank Dibbell

I came across a simple formula the other day that is somewhat useful for calculating the "age" of the Moon. Since I don't like doing things "long-hand", I played around with the formula, and built a function macro using my Microsoft EXCEL spreadsheet software. I now have an EXCEL function that will return, for the date I specify, the age of the moon. If you've built macros in EXCEL before, this should be a snap. If you haven't, and would like a copy, I'll make it available on the FPOA's Macintosh.

First thing you want to do is define a function macro, which I call "MoonAge". The macro will look like this:

		A
1		MoonAge
2		=ARGUMENT("year")
3		=ARGUMENT("month")
4		=ARGUMENT("day")
5		=MOD((year), 19)
6		=A5*11
7		=MOD(A6, 30)
8		=A7+day
9		=IF(month>2, (A8+month-3), (A8))
10		=IF(A9<30, A9, A9-30)
11		=RETURN(A10)

Next, I create a spreadsheet, where I can enter the macro with its three arguments. Let's say I wanted to find out the age of the Moon on 11/21/91. I would pick an empty cell on a spreadsheet, and type in: MoonAge(1991, 11, 21). When I hit <ENTER>, the result will be a number giving the Moon's age in days past "new"!

If you want to be a little fancier, create an input field with an EXCEL field format definition of "mm/dd/yyyy". This is the field where you will enter the date desired. For this example, use cell "C3" as the one defined for putting in the date.

On the output field, which will contain the result of calling the "MoonAge" function, use the EXCEL expressions for month, day, and year (called,

interestingly enough, "MONTH", "DAY", and "YEAR").

So I input the date into cell C3. I want my output Moon's age in cell D4. I would then code, in cell D4, my arguments for my defined function as follows:

```
MoonAge(YEAR(C3), MONTH(C3), DAY(C3))
```

Please let me know if you are interested in seeing more things like this. If you have some simple astronomical "tools" you'd like to share, give me a call, send me a note, and I'll see that it gets published!

\* \* \* \* \*

## Telescope Certification Classes To Begin

Effective May 1st, 1992 all Certification Cards have expired. What does this mean to you? Simply put, if you have been certified to run the 30-inch scope, you will need to attend re-certification before you will be able to sign up for 30-inch scope time again.

The first Certification class of the year will be on Saturday, May 9th, 1992 at 3:00 PM, and will be held once a month on New Moon weekends thereafter.

The only requirement for attending a certification class is that you be an FPOA member. Once certified, you may reserve the 30-inch scope for your own use on any available night by calling Rick Morales at (408) 623-4081. There is one small obligation, however, to being a certified member: you must sign up to assist during a public program sometime during the year. Failure to do so can result in loss of certification.

For more information on signing up to help at public programs, or what is involved (usually just answering the public's questions and/or running the telescope), call Rick at the number listed above.

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# Medlock's Win District Award

The Gavilan District of the Department of Parks and Recreation have awarded Kevin and Denni Medlock the Volunteer Award for 1991 for their outstanding contributions to the Fremont Peak Observatory Association. District Superintendent Harry Batlin noted in presenting the award to the Medlocks that "they were the driving force in having the Department of Parks and Recreation approve the building of an observatory in Fremont Peak State Park. Through their efforts the Association was able to finance the construction of the observatory with a generous donation from Celestron. The 30-inch telescope housed in the observatory was made available for use by a generous loan agreement with the Association. The Fremont Peak Observatory Association and its many volunteers have made it possible for thousands of park visitors to view and understand their universe. Without their generosity and hard work, this would not have been feasible."

\* \* \* \* \*

## Thank You, Orion!

We wish to publicly thank Orion Telescope Center for donating three Orion eyepieces to the Fremont Peak Observatory Association. The eyepieces, a 15mm, 10mm, and 7.5mm, were delivered to the Association by Debra Wollesen of Orion through FPOA member Tom Hoffelder.

The Association will get much use of these eyepieces during our busy schedule that we have planned for 1992. From all of us in the Association, thank you again!

**Volunteers needed to staff an FPOA booth at Riverside this year. Call Denni for details.**

# COSMOCON 92

COSMOCON is a unique Astronomy convention jointly hosted by the Astronomical Association of Northern-California, the Astronomical League, the Association of Lunar and Planetary Observers, and the Western Amateur Astronomers.

The purpose of the convention is to celebrate the spirit of discovery in Astronomy. It will be co-hosted by San Jose State University, and take place from July 13th through July 18th, 1992.

For a registration packet and further information, please write to:

## COSMOCON 92

Krebs Convention Management Services  
Pioneer Square, Suite 200  
555 De Haro Street  
San Francisco, CA 94107-2348

(415) 255-1297

### FPOA Officers and Directors

President	Frank Dibbell	(408) 974-7319
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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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