

THE FREMONT PEAK OBSERVER

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FREMONT PEAK OBSERVATORY

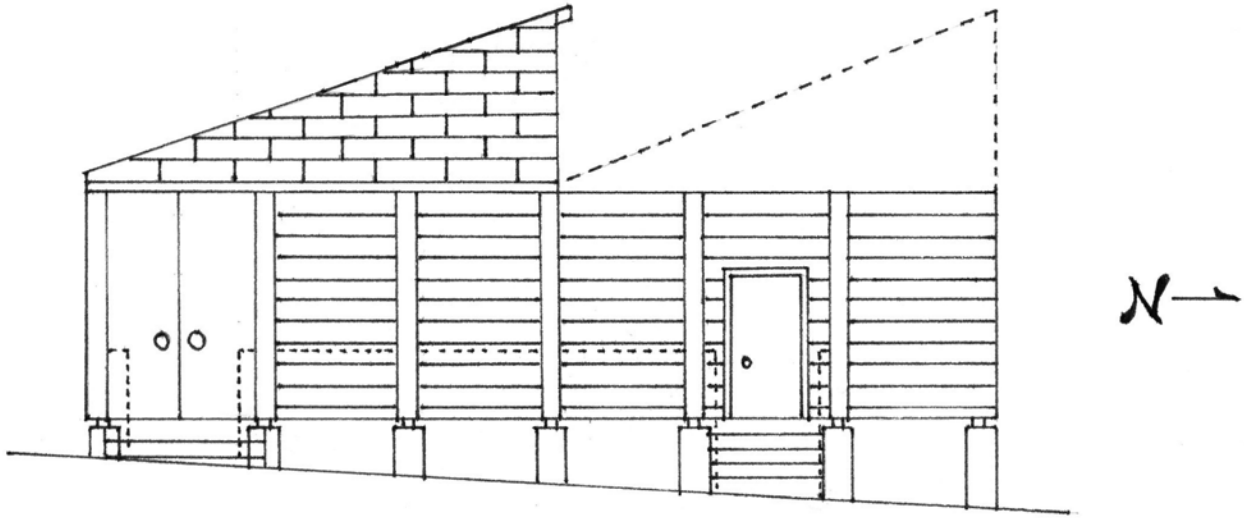


Figure 1: The east wall of the 30" Observatory. The observing room is on the left, the meeting room is on the right (Drawings by Denni Medlock).

THE 30" OBSERVATORY

by Denni Medlock

The architectural drawings for the Observatory building have been finished, and were submitted to the State Park Service on October 12th. We expect the "go-ahead" to build in about three to four weeks.

The Observatory building, designed by Morgan Smith Architects of Berkeley, is a 20 foot by 40 foot structure divided into two equal rooms 20 feet on a side. One room will house the telescope, and the other room will be a lecture/meeting room. The roof of the observing room is sloped, and is designed to roll off over the flat roof of the lecture room when the telescope is in use. A circular skylight has been designed into the north side of the sliding roof to allow for natural light in the observing room.

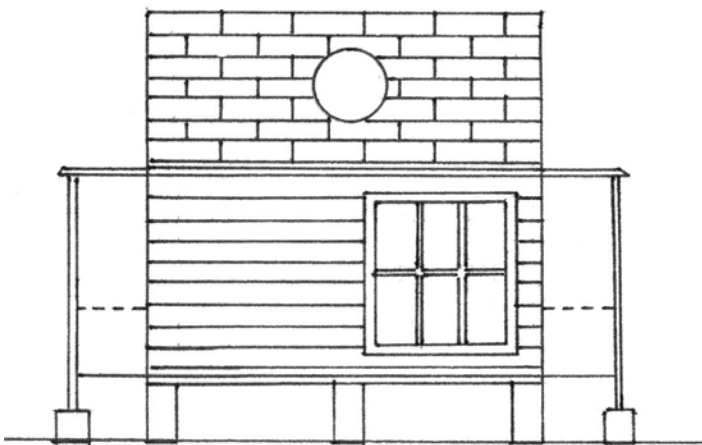


Figure 2: Looking south, facing the north wall of the meeting room. The skylight in the roll-off roof allows natural lighting in the observing room.

The lecture room, which will also double as a warm-up room in off-hours, has two windows,

and two doors for easy access from either side of the building. The double doors of the observing room have been specifically designed to allow for the installation of the 30" tube assembly. Decking and handrails run partly the length of the building on both sides, and a ramp is provided on the northwest side for handicapped access.

A roll-off roof Observatory is not a conventional building. While it is simpler in design, cheaper than, and in most respects superior to a domed building, it still provided a challenge to the architect. Initially, it was just to be a 20 foot by 20 foot Observatory only, but the State Park Service wished to see a lecture room attached to the observing room, thus doubling the size of our original plan. This added requirement forced the designer to drop the height of the lecture room relative to the observing room by a few feet so that the roll-off roof would clear the flat roof of the lecture room (the accompanying drawings do not accurately represent the true building elevation, thus they do not reflect the change in height).

Because a roof is normally an integral part of a structure, one that moves requires the walls to be re-inforced. Therefore, the original design needed to be modified to include structural iron in the southern corners. The south wall also had to have shutters designed which open outward to allow viewing of low southern objects like Omega Centauri.

All this added up to extensive planning and design work between Kevin Medlock, Morgan Smith, and Jerrad Turner, the structural engineer. The result should prove to be an efficient and aesthetically pleasing building, one that the *FPOA* and the State Park Service can be proud of.

ANNOUNCEMENTS

Call For Volunteers

We will be needing able-bodied individuals to help in construction of the 30" Observatory. *FPOA* member Charlie Carlson has volunteered to be our general contractor.

Charlie is busy putting together the list of materials needed from the architectural drawings. If you have a pickup truck, and/or you think you can drive a nail with a hammer, we need you!!!

To volunteer, call Frank Dibbell at (408) 735-9597.

Official Ground-Breaking Ceremonies Annual General Meeting

Official ground-breaking for the 30" Observatory will be taking place fairly soon. The date can't be set until we have final State approval of our detailed architectural drawings. We also want to make the official ground-breaking coincide with our annual general membership meeting. We will attempt to notify everyone of this date by mail or phone. If you wish to be there, please call Frank Dibbell at (408) 735-9597.

1986 Membership Notices

In December you will be receiving your *FPOA* membership renewal notice. The *FPOA* needs your support now more than ever! Please take the time to fill out the renewal notice and return it promptly. Remember, your membership fee is tax-deductible!

PROGRESS REPORT

by the FPOA Board

The "Paper Mill"

Our contract with the State of California has been approved. We have no other forms that require processing at this time!

Observatory Status

The Observatory site has been cleared, our detailed plans are in to the State, and we have the funds to buy our materials. See the feature article by Denni Medlock for more information.

The 30" Scope

The 30 inch scope is a dual purpose telescope designed to be either an f4.8 Newtonian or f14.6 Cassegrain. It will be installed initially with only the Newtonian focus operational; the Cassegrain focus will be added on at a later date. The 30 inch will be equatorially mounted on an English Cross-axis mounting.

Kevin reports that the scope is essentially ready for final assembly.

The 22" Scope

The 22 inch scope is set up as an f4.5 Newtonian. It will be equatorially mounted on a standard fork mounting.

The building to house the 22 inch scope will be very similar to the 30 inch observing room. The plan calls for locating the 22 inch observatory due west of the 30 inch observatory. Work on this observatory will commence upon completion of the 30 inch observatory.

MEMBERSHIP NOTES

by Frank Dibbell

The Board wishes to extend a special recognition to the following people who either joined the *Association* as Life members, or upgraded their memberships to Life status:

Richard Bennett
Robert Black
Christopher Angelos
James G. Williams
Don Stone

Association membership now stands at 91!

AN HISTORICAL PERSPECTIVE

by Frank Dibbell

On Saturday, October 19th a dozen or so intrepid *FPOA* members gathered at the proposed observatory site at Fremont Peak State Park. The group, headed by Kevin Medlock (designer and builder of the 30" reflecting telescope to be housed here), staked out the optimum location within the site for the building.

The rest of us, armed with rakes, hoes, and other ground clearing implements, manually cleared the area selected by Kevin in preparation for our official ground-breaking ceremonies. Official ground-breaking will commence once we get the final approval of our detailed architectural drawings, which at this very moment are being examined by the State of California. Hopefully, we will get the go-

ahead by mid-November.

The ground-clearing exercise was very exciting! Now, for the very first time, I could see where the building would actually be! Stakes hammered into the ground marked the corners of the building and its adjacent meeting room, and string tied to the stakes outlined its walls.

Looking back at the events of the past year shows just how far we have progressed, and how much we have done, to make Fremont Peak Observatory a reality. At times it has seemed that things moved much too slowly. With the help of some very enthusiastic Park Service personnel, the *FPOA* overcame some major hurdles.

I remember the first obstacle we encountered early in the year: Fremont Peak State Park had no park plan. Without a park plan we would not be able to build a permanent structure within the park. We found out that it would take roughly 4 or 5 years, and around \$250,000 to get a park plan for the park. Needless to say, we were somewhat depressed.

After some meetings with State Park people, we found out that we *could* build a temporary structure in which to house the scope. The difference between a permanent and temporary structure? Our "temporary" observatory would be supported on piers, rather than on a real foundation. Also, it would have no plumbing. So, we were back in business!

Another problem was funding. Our treasurer, John Stewart, was busily filling out all the forms necessary to get us our tax-exempt status. Tax-exempt status would make it easier for us to seek funds, since they would be tax-deductible contributions to the donators. We hit "paydirt" in June, when **CELESTRON INTERNATIONAL** donated a van-load of small telescopes to our Association. The subsequent sale of this equipment netted the *FPOA* over \$18,000.00!

While all this was going on, Kevin and Denni were working with the architect to design the observatory (*See the accompanying article by Denni on the Observatory itself*). These plans went through several iterations before being submitted to the State. Meanwhile, Kevin had his hands full building the 30" scope, and Denni was busy having her second child (Paul Allen Medlock, born August 26th at 8:24 AM,

8lbs 8oz, 21 inches - congratulations!). Throughout the year it was necessary to hold numerous Board Meetings for planning purposes - not an easy task when the Board members are spread out from Emeryville to San Juan Bautista!

In addition to the "glamorous" work, i.e. building the scopes and designing the Observatory, a lot of little administrative things needed to be done. For example, Association member Robert Clark volunteered his services and those of his home computer to maintain our Association membership list, and to generate the address labels for the Newsletter and other mailings.

All told, this past year has been a rewarding one, full of challenge and accomplishment. We have come a long way this year, and 1986 promises to be just as challenging, and even more rewarding!

COMET HALLEY OBSERVING

by Frank Dibbell

Last January the *FPOA* had a rather ambitious goal of having the 30" telescope up and running in time to view Comet Halley. In retrospect, it seems our goal was perhaps a little *too* ambitious (we knew nothing of Park Plans, Environmental Impact Statements, etc. at the time!).

Nevertheless, we will still be having Comet Halley observing nights at the Observatory site, utilizing some of the smaller, portable telescopes which belong to the *Association*. Scheduled observing nights (weather permitting) through January 1986 are:

- Saturday, November 16th
- Saturday, December 7th
- Saturday, December 14th
- Saturday, January 11th (1986)

If the weather looks a little chancy, you may call Rick Morales at Fremont Peak for an update. His number is (408) 623-4255. If you wish to volunteer to man a scope for one of the above nights, call Rick and leave him your

name and the night you would like to volunteer for.

Comet Halley observing nights are open to the general public.

The purpose of the *Fremont Peak Observatory Association* is to provide educational and interpretive services of astronomically related topics to visitors of Fremont Peak State Park. The *Fremont Peak Observer* is published quarterly, and is the official publication of the *Fremont Peak Observatory Association*. Articles and other items for publication should be sent to:

Frank Dibbell, *FPOA*
710 Georgia Avenue
Sunnyvale, CA 94086

Deadline for articles is the 15th of the month preceding the month of publication.

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