

### Preparation:

Dress in layers, bring a warm hat, no white lights. Water resistant shoes can be comfortable if the grass gets dewy (and it usually does). Keep in mind you will be stepping up one or two steps on an aluminum ladder, so shoes that aren't super slippery is a good idea. Tail light repair tape from the auto parts store can be used to make a white light red. A light weight chair can make waiting in long lines at the telescopes easier.

### viewing:

**Time Machine** When we look at distant objects through the telescope we are looking through a time machine, looking back in time at how things looked when the light left them. Photons of light that left from the object being looked at perhaps hundreds of thousands of years ago are ending their journey by landing in your eye. We don't really know how those objects might look right now, or if they're even still there.

**We are what we see** We are taught from philosophy that when we look out our eyes we are projecting an interior experience; that we *are* that which we see, and we make a mistake of identity by pretending that we are a separate observer from the thing we see. So I believe that when we look at very distant things through the telescope we are also looking very deeply within our own mind.

### Thoughts to ponder when

### The night sky is part of nature

Astronomy is like walking along the beach looking in tide pools at starfish and sea urchins; even though they all look the same, we never tire at looking at them because they are beautiful pieces of nature. In the same way the objects we look at through the telescope never really change, but we never tire of looking at them because they too are pieces of the natural world, the only difference is that you need an instrument in order to see them.

### Are You Capable?

**Balance:** To be able to have a good experience you should be able to step up one or two steps on a ladder and have some balance ability in that you might have to lean forward and stick a leg out behind you for balance while standing on one foot. Of course you have the height of the ladder in front of you to hold onto, and it's really not hard at all for the majority of people. Also, many objects are low and don't require the ladder except for the young or very short, and some tall people may not need the ladder except for the more overhead objects.

### Vision:

The telescope is an awesome eyeglass and can correct for any level of vision correction needed except for astigmatism. People with minimal astigmatism get the best experience looking without their glasses, while those with significant astigmatism will find using their glasses give the best views. The eyepieces I use have eye relief appropriate for eyeglass wearers. Contact wearers (myself among them) will have no difficulty.

### **Age:**

The very young and the very old may be challenged. In particular we want children to have the best experience they can have. Their eyes allow them to see detail us adults can no longer see. The youngest children however are challenged by the concept of looking into the eyepiece. I recommend before bringing a young child to a star party that you teach them to look into an eyepiece by using one eye to a View Master toy, periscope toy, or microscope; even looking through a paper towel cardboard tube can be an effective training tool.

### **Questions I'm often asked:**

**What kind of scope is it?** Cyclops is a 16" Newtonian telescope on a Split Ring Equatorial mount. I call it "Cyclops" because I painted a large black circle around the eyepiece so there wouldn't be reflected light annoying you. After I painted the circle, I realized it could be an eye, so I painted the rest of an eye shape and the telescope got it's name, Cyclops: you have to look through the giant's eye in order to see.

#### **Why did you build it?**

I built it because you can't buy an instrument like this. I built it primarily for public events. For many people who look through my telescope this may be the only time in their life they get to look through a 'real' telescope, and I want to give people the best view I can afford. I built it on an equatorial mount with the intent of doing imaging (photography).

### **How much did it cost?**

I don't really know, but it was less expensive than buying a similarly sized commercial telescope, and I spread it out over 4 years. Probably in the \$10-\$12,000 range.

### **Do you do imaging (photography) with it?**

I'm building the equipment now to be able to.

### **Have you seen UFOs?**

I have not seen any while out observing (which amounts to a considerable amount of time under the stars). However, I have seen UFOs five times in my life, four times very close; not just some little mysterious light in the sky, one experience about 50 feet away.

### **When can I look through your scope?**

I do public events (along with a dozen other local amateur astronomers) to support John

Charlesworth's college program. These occur at Skyline Park several times during the year. I am also a docent for astronomy at Mt. Diablo State Park and am a member of the Mt. Diablo Astronomical Society and do public events on Mt. Dialbo a couple times a year. I also do private star parties for hire. You can receive email notifications by sending me an email from the button on the front of this web site, or just check back frequently as I post upcoming events on the front page.