4-68

Prairie Astronomy Club April 1968 Lincoln Nebr.

Wext regular meeting April 30th. 7.30 PH Science Bld, Nebr Weslayan.

The Hobby show at the State Fair Grounds was a real success. Thank you, Ed Woerner for your work in making it so.

A lot of good things are happening in and for your club of late so some to the next meeting and find out "What"

How many of you also, cried a few dry teers when we got clouded out ECLIPSE Night ?

The formation of Lunar Craters

If you asked a layman how the craters on the moon were formed, he -would probably reply: Some meteorites crashed into the moon, formingthe craters ".He is only partially right. Indeed some of the smallercraters were formed in this way, but most of the larger craters (act
wally called mounain walled plains) were formed by a caldera. A caldera is a circular depression formed by a rather small amount of vol
canic activity, which causes the floor of the caldera to sink. If anymeteoric impact did occur during the formation, it merely triggeredvolcanic action.

Lets take for instance the walled plain Oppernicus. I suppose this is what happened. A meteorite probably no larger than the one that — in Siberia in 1909(?) triggered the calderia. At the same time it produced the rays, then a series of caldera-like collapes occured. (See Sky and Telescope Jan 1967 P 25-26) The central mountains were caused by some extra volcanic activity after the original Estion occured.

Question: Thy do so many walled plains have Hexagonal Walls?

(Copernious, Grimalda, Ptelamaeus, Clavius Ets.

Eric Rudd.

A Paradox

You look in the same direction when you look west to see the Sun set as when you look East to see the Sun rise. At position "A" a person looks towards the west to see the Sun set. As he travils through the night, he comes to position (B). At this point He looks to the east to see the Sun rise and at looks to the looks to the south to see the Sun overhead. However, as shown in the diagram he is looking in the same direction no matter at what point he is located. In other words, as long as a person is looking towards the Sun, he is always looking in the same Direction.

SUN

Dont worry about ICARUS.

Some astronomers have speculated that when the asteroid Tearus passes near Hercury in 1968 it might be pulled out of itd orbit and diverted onto a collision course with the Earth. Since Icarus is a half mile in diameter, such an encounter would make the largest hydrogen bomb explosion ever set off look like the popping of a firseracker. (Cont Next Page)

" P.S. Yes we will have refreshments "

Cont from page One. Dont worry about Icarus

However after lengthy calculations using a computer, Dr Samual Herrick of the Uni of California at Los Angeles has determined -that Icarus will pas Hercury on May Ist 1968 at a distance of Ten Hillion miles which will be to far for Hercury, s gravitational.... attraction to have much effect on the orbit of Icarus. On its caosest approach to the Earth on June 15th 1968 Icarus will pass at a -

distance of 4.000,000 miles. So Relax.
A russian estronomer ,K.Stanyulovich,has Suggested that Icarus could be forced out of its Solor Orbit in 1968 and transformed into an Earth orbiting space station. Dr herrick commented "To do that some one would first have to land on learns and slow it down- maybe byblasting it in helf-from 25 miles per second to one quarter mile per second". "Such a feat seems highly unlikely, he added dryly.

On December 1st there were 1,281 man made objects in space, according to an informal count by the Smithsonian Astro-physical Observatory.

Modern Optics.

The Astronomical telescope used to be considered the ultimate in precision optical designand fabrication. Today, the astronomical tel--escope is a rather crude devise in terms of optical performance.

The Rayleigh limit was for decades an ultimate performance goal! today it is recognized as being a rather coarse criterion of quality. The astronomical optics now reach higher standards. Space optics and ballon bourne instruments are fabricated and tested to 1/50 of a wavelength, and earth based telescopes are produced to comparable standards.

Bill Noel has a good tri-pod for a six inch he would like to sell. Also anyone wanting a 200MM telephoto lons see

Hard Facts. A Telescope cannot See. Its up to you. We should appreciate the scientist, s conviction that the world around us is knowable, and should understand that the essential equiptment for knowing it is not some powerful and complex instrument but the mind.

The President, a Report April was an active month, Hobby show the 6th and 7th. Our Club had a fine Display, well attended by Club members, and the Gateway Show on the 11th was one of the best. The total esclipse was a washed out by Clouds and Rain on the 12th. We will try again in October.

Our Club was invited to K.C. No Astro Club Heeting on April 20th The special guest speaker was Robert Cox Of St Louis. His Talk is about new types of Telescopes, with spherical mirrors and optics. Russ Maag called me Sat morn just before we were ready to leave and told me that he had been mis-informed on the Date. It is supposed to be on the 27th instead of the 20th, so now we will re-organize this meeting again. We plan to leave Lincoln A little after noon, to give plenty of time to find the City Museium annex where meeting is held.

Now all these extra activities are fine, however we must not --neglect our regular meeting and program. Larry Stepp our Vic Presand Program Dir, would appreciate help in this preporation. Lets all help in this. Tell us in what particular part of Astro you are interested in. We need Volentears each month to make our meetings a real auccess, Earl Hoser.