

## Re: Have refractors hurt the hobby?

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Rich A. wrote:

*>About 17 years ago, Meade and Celestron tried to help out here. They  
>both offered only decent (not great, but workable) 60mm refractors  
>with reasonable 1-1/4" eyepieces and real finderscopes. This was a  
>noble attempt by them to "upscale" the beginner. It worked for a bit,  
>but ultimately, both companies for whatever reason decided to dispense  
>with all pretense at being the hobby saviours and started selling  
>the same garbage scopes Tasco and Bushnell and Swift, etc, had been  
>selling.*

Actually, Meade does produce such a telescope, 60AZ-A and it costs \$50 at Walmart. After reading the Sky and Telescope editorial, I decided I would see exactly how bad these scopes are.

What do you get for your \$50?

A color free 60mm F11.7 objective, a metal tube, and a surprisingly smooth 1.25 inch plastic focuser. It comes with 2 decent 1.25 inch MA eyepieces, a 25mm and a 9mm, it has a full aperture, reasonably sharp 5x24 finder (unlike finders of the past that were stopped down), a real mirror diagonal, a chincy but workable barlow, and a mount that takes a while to settle down, probably a true 5 second settling time.

An experienced observer can see a variety of DSOs from Mag 3.5- 4 skies including the ring, the dumbbell and the Andromeda galaxy. It seems to split double stars rather nicely, Castor at about 4 arc seconds is doable though so far the double-double has eluded it even at 140X. It shows 4 stars in the Orion Nebula, the rings of Saturn, the moons of Jupiter, hints of the cloud belts, Venus and Jupiter in the same FOV on a morning like this....

This scope also focuses to about 16 feet which allows it to be used as a spotting scope. Unfortunately my guess is that the long focuser drawtube necessary for this may restrict the aperture.

The good points are that the objective and eyepieces seem decent, the eyepieces, including the barlow are nearly Parafoal, and the finder actually works. It was really quite a surprise to look through the focuser and realize

sci.astro.amateur: Re: Have refractors hurt the hobby?

that it was actually quite good. I also think the fact that the eyepieces and barlow are parafoveal is important for a beginner because it means after changing eyepieces one can still see the target.

The biggest problem with this scope is that the mount is quite shaky, improvements are possible with various techniques, mostly patience on the part of the observer, waiting for the shakes to end is actually possible. An upgrade of the diagonal and barlow would probably be in order at some point.

But the bottom line here is that this is a scope that a competent observer (with the right attitude) can use and enjoy and it costs \$50.

So, have cheap refractors hurt or helped the hobby?

A couple of years ago Larry Gilstrap cautioned S.A.A. to be careful with elitism. I remember this often. Certainly nice telescopes are nice to have. Comparing my Pronto (which some would snub for not being an APO) provides far sharper and brighter views than the Meade 60AZ-A.

But that is not the issue. The issue is whether the Meade 60AZ-A is capable of providing a glimpse of the universe that sparks a person into a life long enchantment with the night sky.

I believe it can.

This scope is certainly far better than that \$5 garage sale special that sparked me, the mount is sturdier, the finder better, the eyepieces far better.

I am one who believes that it is not about the telescope, it is about the observer. If such a scope cannot excite you, make you wonder, pleasure in the view of a colorful double, gasp at the hint of nebulosity in Orion, wonder at the moons of Jupiter, if such a scope cannot do this, then one is probably not long for this hobby anyway.

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Second bottom line:

I would never recommend that someone buy this scope if there were other possibilities. And I would probably recommend that anyone with \$50 buy a set of Orion World View 10x50s because they are a better overall quality instrument.

There is no doubt that this scope and scopes like it (and there are worse scopes that cost more money too) have serious drawbacks and serious limitations.

So, I encourage anyone and everyone to point people towards binoculars, Orion scopes, Apogee Inc scopes, quality telescope vendors like OPT, AT&WB and all the rest.

Re: Have refractors hurt the hobby?

sci.astro.amateur: Re: Have refractors hurt the hobby?

But the reality is that there are going to be a lot of folks with 60mm refractors this Christmas and that with some guidance and patience, they too can actually use their scopes to tap into the joy and excitement that comes from viewing those far away distant objects.

It is my intention to follow Larry Gilstrap's path and rather than bemoaning the quality and difficulties inherent in these scopes, I hope to provide guidance and encouragement for those with these scopes.

As I see it, as experienced amateurs, the worst thing we can do is snub these scopes and thus the people that own them. If we want to encourage people to learn the joys of astronomy then we need to embrace everyone regardless of their equipment or their skills.

One comment that is often made regarding these scopes is that they are far better than the ones that Galileo used, this maybe a cliché but there is a great deal of truth in this. A 12 inch scope gathers about 25 times more light than a 60mm refractor.

But a 60mm refractor gathers about 100 times more light than the human eye, and that is what is important.

So, I hope that rather than dismissing these scopes as junk, each of you takes a second look.

Last night I had the 10 incher setup and I spent a couple of hours with it. When I put it away I took out the Meade 60-AZ-A and spent another hour just looking.

I had a great time.

Jon Isaacs