

FIRST LIGHT VOLUME 2, NO. 3?

CONTEST!!!

NASA is searching for a new name for the Advanced X-ray Astrophysics Facility (AXAF), currently scheduled for launch on December 3, 1998, from the Space Shuttle Columbia. AXAF is the third of NASA's Great Observatories, after the Hubble Space Telescope and the Compton Gamma Ray Observatory. Once in orbit around Earth, it will explore hot, turbulent regions in the universe where X-rays are produced.

Entries should contain the name of a person (not living), or thing from history, mythology, or fiction. Contestants should describe in a few sentences why this choice would be a good name for AXAF. The name must not have been used before on space missions by NASA or other organizations or countries.

The grand prize will be a trip to NASA's Kennedy Space Center in Cape Canaveral, FL, to see the launch of the satellite aboard the Space Shuttle. Ten runner-up prizes will be awarded and all entrants will receive an AXAF poster. NASA will announce the final selection of the winning name later this year.

Contest rules, electronic entry forms, and additional information can be found on the Internet at <http://asc.harvard.edu/contest.html>. Entries can also be mailed to AXAF Contest, AXAF Science Center, Office of Education and Public Outreach, 60 Garden Street, MS 83, Cambridge, MA 02138. Mailed entries must be postmarked no later than June 30, 1998, so HURRY!

AN OFF-AXIS SOLAR FILTER

by SEALTH

Ever since first seeing the price of full aperture solar filters, I've been thinking there has to be a better, read "cheaper", way of doing this. It occurred to me that one should not need the full aperture of an 8" SCT to view the Sun, even though most of these filters transmit only around 1/100th of 1% of the Sun's light. So I set out on the idea of making an aperture mask and using a much smaller solar filter.

At this year's Winter Star Party, back in January, I happened past Pocono Mountain's booth. They had for sale a Kendrick Kwik Focus Lens Cap and also some unmounted glass solar filters. "Ding", the lights went on! I've been wanting a Kwik Focus Cap AND a solar filter and here was a way to get both. (For anyone who does not know what a Kwik Focus Cap is, you can check out a picture of it in Jim's web page listed below. Basically it is just a regular full-aperture cover in which has been cut two holes on opposing sides. This produces double images when the scope is out of focus and the images neatly converge when perfect focus is achieved. My idea was to leave the plug in one hole and fit the solar filter to the other.)

Back in Seattle, the weather was its usual gray wintery self, perfect for catching up on all these little odd jobs, so I set about mounting the filter. For this I purchased some industrial grade Velcro at a local hobby and craft store. Now this stuff is heavy duty! The backing is fairly thick and the adhesive is definitely industrial strength, very thick and very sticky. I cut the material into a set of semi-circular rings such that I could place a complete ring of Velcro material about a quarter of an inch in width all around the filter, flush with the edge. You might be able to find sheets of Velcro

large enough to cut the entire circle in one piece; mine were not that big. The unmounted filter was about a half inch larger in diameter than the holes in the Kwik Focus. I did the same with the hook side of the Velcro around the inside of the Kwik Focus, flush with the inner edge of one of the holes. The solar filter then mounts nicely inside the cap leaving just enough space near the outer edge for the OTA to slip in and it is just small enough to clear the central mirror. I can also use the Kwik Focus for its intended purpose by removing the solar filter and the hole plug on the otherside.

Evaluation: While a full aperture Thousand Oaks solar filter would have cost me about \$90, my total cost of building this unit was under \$55 - the Kwik Focus Cap was \$30, the unmounted filter was \$20, and the industrial strength Velcro was around \$3. I purchased these materials way back at the end of January and it has taken until now for me to get a nice enough day on the weekend to give it a try. The seeing was VERY soft but the Sun is currently treating us to some nice sunspots. Focus through a 2" aperture was difficult - the image doesn't snap in as quickly as it does with a full 8". Also, the smaller aperture and the bright, even illumination of the sun is quick to show you every little speck of dirt and dust in your eyepiece and diagonal. Some of what I thought were subtle dark areas on the solar disk turned out to be dust on my eyepiece. Also, 2" aperture lets in just barely enough light, considering all the light "noise" you get flooding in from all sides. It's not dim, just not real bright. Detail was good, when seeing allowed. I could see detail at the edges of the sunspots and also see many very tiny spots in groups around the disk. I could not see any granulation but suspect that may have been mostly due to the unstable air. In all, I am very pleased with the outcome and not only did I save a few bucks but also got a focusing aid in the deal.

Happy day-star viewing!!

Resources:

Jim Kendrick Studio <http://www.rahul.net/resource/regular/products/kendrick/>
Pocono Mountain Optics <http://www.rahul.net/resource/regular/products/pocono/>

BYTES AND PIECES

ray` got a brand new 8" LX-50 on April 27. Congrats, ray`! Great scope, and it should bring you many hours of viewing pleasure for years to come.

Tprinty got married on May 21, in Hawaii. His bride Polly has quickly become interested in astronomy, which is good, because T is an addict!! They will live in New Hampshire when T's current tour of duty in the Navy is up. Better invest in some longjohns, T!

losmandy also recently tied the knot, on Friday June 5. Congratulations, los!! Believe it or not, he was on #sciastro within an hour of the ceremony!!! Those of us who were there gave him a riotous send-off.

skygazer and his wife have a new baby girl, named Ashley Noelle, who was born on May 31, 1998. She is absolutely adorable!! (must look like her mother - hehhehheh) And she's already got her own homepage. Get sky to give you the URL - the proud new papa had the website up within 24 hours of her birth!

ray` isn't the only one who got a new scope. Sealth takes delivery of his new 18" f/4.5 StarMaster at the Table Mountain Star Party. Todd^ has ordered an 18" StarMaster with a GOTO system and a Stabilite mirror. He also has a 5"

Astrophysics APO on order. His StarMaster is slated for delivery in the early fall. AstroSetz just received his 22" StarMaster with a GOTO system around the end of May. Happy viewing, guys!!!

CRAWLING THE WEB

Thinking about grinding your own mirror? Check out <http://www.newportglass.com/> They have information on grinding, kits, tools, books, and all kinds of goodies to aid in the process.

Well, several of us tried, and failed, to get a look at a SOHO comet, 1998J1. For those of you that think it was fiction, try http://sohowww.nascom.nasa.gov/cgi-bin/summary_image/980508 Click on "Latest Images" on the left, then SOHO Summary Data, then SOHO LASCO C3 Telescope to get imagest of 1998J1. Thanks to DaveJ for this site!

More laughs! Here's one that will tickle your funny bone! <http://www-personal.umich.edu/~dnash/astrogeek.html> Joe3 sent this one in and it is a hoot!

You can download DeepSky, a great little astronomy charting and planetarium program at <http://www.deepsky2000.com> Its database contains 18 million stars, 150,000 deep-sky objects, 150,000 double stars and variables. However, be sure to allow yourself plenty of time - the file is 28 megs!!!

Another nifty spot for astronomy software is <http://www.isc.tamu.edu/~astro/software.html>

Want to check on the International Space Station's progress? You can at <http://station.nasa.gov/core.html>

Your editor should have included this URL long ago. <http://www.portup.com/~halbroom/startimes.html> is the location of Star Times, which is a summary of daily astronomy news stories, all in one place. This is a wonderful resource! I check this one every day!

Here is another great resource: <http://www.astroarchive.com> This site has archives of newsgroups and mail lists, including sci.astro.amateur, astro, MAPUG, ATM, CCD User, SBIG User, and many more. There are over one million searchable key words in the data base.

This site came from Rigel. <http://wild-turkey.mit.edu/chemicool/> It's a terrific chart of the periodic table of elements! Really nice!!

PHOTO GALLERY

A lot of sciastroites have been out taking pictures, and CCD imaging. Here are a few:

M3 by Flash_CA This is a 15 second exposure through a 4" Takahashi. Flash used a SBIG ST-7, and flat field correction, to get this image. Very nice and crisp!

M17 by Todd^ This is a 2 minute exposure with a Starlight Xpress CCD. Todd^ shot this through a TeleVue Traveler. Lovely!

NGC 5128 Centaurus A by losmandy This one really blew me away, as it is one of losmandy's very first attempts at CCD imaging. He used an ST-7 and stacked 5 300 second exposures for the final result. Wow!

M13 by Joe3

M8 by Joe3 These were taken at Chiefland, FL through Joe's 6" Astrophysics. He used PJM film and a 30 minute exposure on each. Just gorgeous!!

Neutron Star by Hrco Hrco is trying his hand at space art. Here is his rendering of a neutron star. Kewl!

Do you have pictures or images that you'd like to share? Send 'em in! to: Editor, First Light, scarroll2@pipeline.com if they have already been digitized, and if not, to P.O. Box 518, LaBelle, FL, 33975. If you are digitizing, we prefer jpgs, or gifs. For each image we need a few details, like the name of the object, time of exposure, film, or CCD imager used, and telescope used. Or you can DCC them to Portia in the chat room.