

Smoky Mountain Astronomical Society

Volume 30, Number 3
March 2007

S. C. R. A. P. S.

Society's **Ch**Ronological **A**stronomical **P**aper**S**

*The winds of March ~~~~~
That make my heart a dancer ~~~*



From the President - Lee Erickson

Ah, spring is in the air. And with that our thoughts turn to what else, Galaxies! The galaxies in Leo are easy to see and you do not have to stay up too late for the clusters in Coma Berenices and then Virgo. Saturn has passed opposition and is climbing high enough to see early in the evening. The great nebula in Orion is still visible nicely after dark. What more can we ask for? How about an eclipse. The evening of Saturday March 3, 2007 will present a moon rising in eclipse. If I read correctly the NASA eclipse plot below, the moon will be in total eclipse as it rises and we should have a bit less than an hour total. The moon should be a very deep red due not only to the usual reddening of our atmosphere when the moon is viewed near the horizon but also by the dim red light leaking around the earth and feebly illuminating the moon in the not completely black Earth's shadow.

<http://sunearth.gsfc.nasa.gov/eclipse/LEplot/LEplot2001/LE2007Mar03T.GIF>

If I have set up my planetarium program, Guide, correctly, Moon rise is at 18:41 ET. As the moon emerges from the Earth's shadow it is fun to try to observe the curvature of the Earth's shadow on the Moon. Try to estimate the relative radius of the Earth's shadow to the Moon's radius. It is by such an observation that the ancient Greeks correctly estimated the relative size of the Moon to the Earth and the distance to the moon as 60 Earth radii about 200 BCE.

But here in 2007, I am making preparation to have a star party in the parking lot of PSTCC on Tentatively Thursday March 22. If all goes as I dream, we will get a small southern parking lot blocked off to traffic. We will get the parking lot lights turned off on the south side, we can make some flyers promoting the event and after they are approved they will be posted for us on PSTCC bulletin boards and we will get an event announcement in the student activity bulletin. I would love for this to bring into our membership some of the students there at PTSCC. Saturn and the Moon will be visible even if we have a lot of light pollution. This will be a rain or (moon) shine event. We will have the Goins's auditorium reserved for indoor discussions and some astronomy videos if the weather goes bad. Please put this on your calendar and we will see you then.

Agenda for March 9, 2007 Meeting

7:00 Meet and greet

Return checked out library books

7:30 Formal meeting begins.

New business Item: Motion by Scott for standing authority to pay liability insurance when due.

Form committee to support March PSTCC Star Party.

25 Minute Program: A DVD from NASA: "Cosmic Collisions".

Special Guests, Astronomy gear by Bill and Tammy Burgess.

When we change our clocks

Beginning in 2007, most of the **United States** begins Daylight Saving Time at 2:00 a.m. on the second Sunday in March and reverts to standard time on the first Sunday in November. In the U.S., each time zone switches at a different time.



Spring forward, Fall back

During DST, clocks are turned forward an hour, effectively moving an hour of daylight from the morning to the evening.



Whut?

All of which leads to SCRAPs' Question of the Month:

What is the shortest day of the year 2007?

Submit answers to The Editor, 201 Willard St, Maryville, TN 37803, or

<http://tech.groups.yahoo.com/group/smokymtnastro/>

Winners will be announced in the April issue.

Minutes of February Meeting - Bill Dittus

The SMAS Meeting was held February 9, 2007 in Room 223 of the Alexander building at Pellissippi State Community College at Harden Valley campus . There were 22 members in attendance.

Pete Bush made an excellent presentation on astronomical sketching. He passed out to all attendees the following sketching materials:

- **#4 pencil**
- **Ebony Sketching pencil**
- **Eraser**
- **Blending stump (cotton)**
- **Vellum template with large circle divided into 4 quadrants**
- **Sand Paper**

He talked the attendees through a sketching practice (of the moon's crater Clavius), showing them how to use the tools and visualize their tasks. Many people discovered they had a knack for it, and enjoyed it a lot.

Pete recommended the book ***Drawing on the right side of the brain***, ISBN: 0-87477-513-2

Bill Dittus asked for last-minute nominations for the next year's executive committee. None were made. Bill then asked Bob Arr (a non-candidate) to assist him with the balloting. Actual balloting turned out to be unnecessary, as the board was elected by acclamation.

- **Lee Erickson was reelected President**
- **Mike Littleton was reelected Vice President**
- **Scott Byers was reelected Treasurer**
- **Bill Dittus was reelected Secretary**

Note: Per SMAS bylaws, officers are limited to two consecutive terms, so please give some thought to volunteering for next year's elections.

Old Business: None

New Business:

Scott Byers delivered the semi-annual treasurer's report. While the club currently enjoys a favorable surplus (about \$1000), it was noted that our annual expenditures exceed our expenses by about \$250.

Passing the Torch at SCRAPS

After three great years, Pete Bush has retired as Editor of SCRAPS. Every month we all look forward to the latest issue, and Pete has delivered without fail. Well done, Pete. To coin a phrase, thanks for the memories.

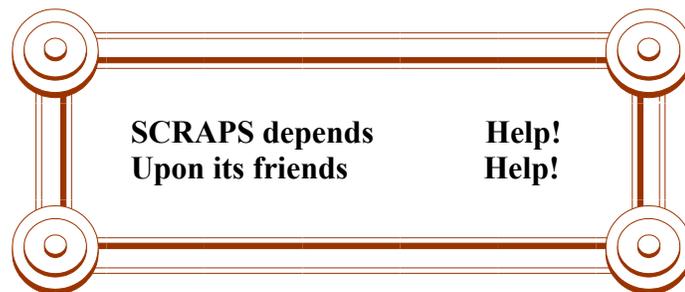
In SMAS, the jobs of editor, publisher and distributor are all combined into one job, and it's a big one. We try to distribute the newsletter on the first day of the month, so our deadline for articles is the weekend prior. But sometimes the weekend prior has a Star Party. Who'da thought such a simple thing could become so difficult, huh?

We want articles written by our members. Your experiences and your astronomic interests are exactly what we want to share with each other. While the newsletter occasionally contains articles from professional sources, you must understand that we always prefer articles written by our members.

I'll be asking many of you to contribute articles during the year. They don't have to be grand or exotic, just related to our hobby. Syntax and spelling don't count (that's what editors are for). Just tell us a story and we'll be happy. And if there is an image or two available, so much the better.

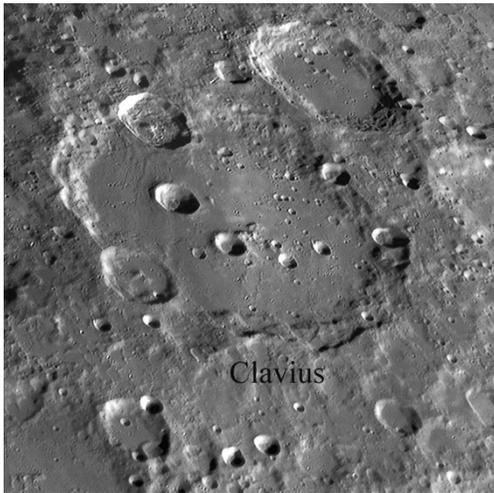
Bob Arr, Editor

YEA fer Pete !

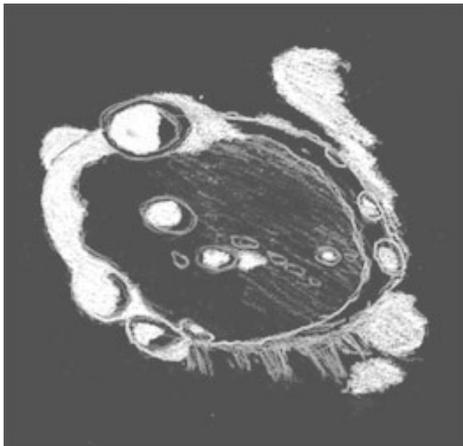


Astronomical Sketching

By Pete Bush



Crater Clavius, professional photo



Crater Clavius, different time.
Sketch by the author.

Astronomical Sketching. Excerpts from Pete Bush's PowerPoint presentation.

Rough sketching of the subject is done in the field, perhaps augmented by notes. While professional photos are useful, remember that the actual position of the sunlight and shadows change constantly, significantly even in one day's time. Thus the observed pattern is almost never the same as a photo.

It often comes as a surprise, but what you see in the eyepiece is seldom oriented as in a photo, simply because the mirrors of your telescope invert and/or transpose the image differently from the telescope of the photographer. Your ability to interpret gets challenged, and that's part of the fun.

While some details can be drawn in the rough sketch, most of the details are applied at home after the fact, using heavier leads, smoothing layers with a blending tool, and revealing bright highlights by erasing the lead right down to the underlying brilliant white vellum paper.

Many people sketch the bright parts with their pencil, producing the reverse image, that is, black highlights on a white background. To get the proper image, the completed sketch is scanned into an imaging program (such as Photoshop) and simply "inverted".

White becomes black, dark gray becomes light gray, etc. Background levels can be adjusted to reproduce the actual light/dark balance (as in the moon's Clavius crater, shown).

Fair warning: you can get hooked on this intriguing and satisfying hobby. If you'd like to know more, ask Pete.

Michael Reuter



For someone wanting to look at the stars, Michael couldn't have picked a worse time of year to join SMAS. He joined just as our viewing season ended last fall, and has been waiting for good weather ever since. His 4" Starmax (Maksutov-Cassegrain) has been waiting, too.

Michael is from Merrimack, NH. He graduated from the University of Illinois Chicago, holds a PhD in Physics (note the wallpaper he chose). He works for ORNL on the Spallation Neutron Source facility as a software engineer.

Miles Iverson

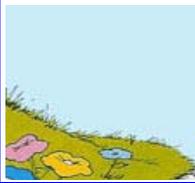


Miles Iverson proudly sports his new SMAS badge. Focused on setting an age benchmark for youthful members, Miles attended his first SMAS meeting in February (age 6 months).

As our membership policy provides, Miles' membership fee includes his entire family. He was accompanied by Mom Angela and Dad Erik.

He says he enjoyed the presentation.

March 2007

SUN	MON	TUE	WED	THU	FRI	SAT
UTK—roof of Neilson Physics Building on The Hill at UT 1st & 3rd Fridays TAO —Tamke-Allan Observatory Public Stargaze Watts Bar Lake, Roane County 1st & 3rd Saturdays				1	2	3 Lunar Eclipse 18:41
					UTK	TAO
4	5	6	7	8	9 SMAS meeting 19:00 PSTCC	10
11 Daylight Time begins	12	13	14	15	16	17
					UTK	TAO
18 New moon	19	20	21 <i>C'mon, you knew this...</i>	22 PSTCC Star Party	23	24
						
25	26	27	28	29	30	31