Akkana's Moon Sketches

I like to sketch the moon. I'm very much an amateur at sketching, and am learning as I go, and gradually learning and improving. The moon is full of transient views which may last less than half an hour; no photographic atlas can begin to capture all its beauty. I hope that some day my sketches are good enough to begin to show some of the fleeting light I've seen on the moon.

Check out my newly minted astrosketch mailing list on egroups if you're interested in discussions about sketching.

See my moon links page for other collections of moon sketches I've found on the web.

I sketch mostly with graphite pencil or, occasionally, charcoal pencil. I'm a big fan of stumps for smoothing -- much easier and better (as well as neater) than smearing the pencil with a fingertip. I have a clipboard with a mini book light (the kind intended to clip to the cover of a book for reading in bed) so I don't have to hold a flashlight in my teeth any more. Except that I usually forget to carry the clipboard with me so I end up juggling a handheld flashlight anyway. :-)

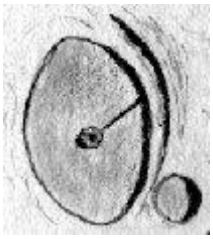
My sketch-hero is Harold Hill -- his Portfolio of Lunar Drawings is my favorite moon book.

Click on any of the images to see the larger-sized version.

I've added links to the relevant pages of the Hitchhiker's Guide.

8/16-17/2003: The Moon Mouse! Near the Serpentine Ridge, Dorsa Aldrovandi sources from a small mountain that, under the proper lighting conditions, looks like a mouse, with the wrinkle ridge its long tail extending out across Mare Serenitatis. Is le Monnier a big cheese wheel he's scurrying to, or just his hole?

When Gassendi is right on the terminator, its southern wall stays dark much longer than the rest of its walls, making it obvious how that side of the crater has sunk along with the mare it borders.



Petavius when lit from behind (just past full moon), has an interesting ring around its southwestern edge. It's too close to the main crater to be a typical shock ring; perhaps a wall slump?

I didn't have time to make a real sketch at the eyepiece the night I noticed Petavius' ring; all I had time for was a quick line drawing.

The Marius Hills, a major dome field near Copernicus; sketched through the Fremont Peak 30" on 9/9/2000.

Rumker on the terminator: Very Like a Whale. (The expanded sketch shows more of the surroundings.) UT 7/14 6:45, 4.5" Newtonian, 180x.

The "Faye Ray" -- not really a sunrise ray, but looks very much like one. Couldn't find any oversized gorillas nearby ...

Long shadows in Maestlin, 6/12/2000 at 9:30pm PDT, though they were rapidly shortening even then.

The Apollo 17 landing area before sunrise. The astronauts were never here at this time of day, but if they had been, they would have seen the tips of the peaks around them starting to shine with the beginnings of sunrise, while the earth shone high overhead in the night sky.

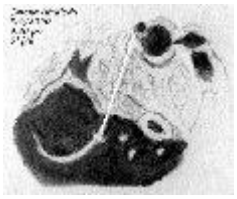
Here's another sketch I made of the same area, 7:45pm PDT 10/2/2000, showing the curiously smooth domelike hill near the crater Gardner (the small crater at the foot of the hill).
Side by side comparisons of the two sketches

Fracastorius, Piccolomini and the Altai Scarp are beautiful in any kind of light, but on 6/6 at around 9:30, at very early sunrise when only part of the Scarp was illuminated, I caught some other weird phenomena: a very prominent ridge extending out from Beaumont, unnamed in Rukl, which I will take the liberty of calling Dorsa Beaumont, and an interesting W-shaped pattern extending into the terminator which turned out to be the well-known trio of Theophilus, Cyrillus, and Catharina just beginning to poke into the light.

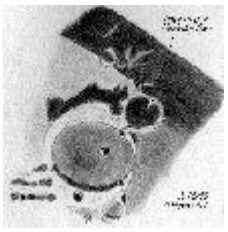
Atlas has radial structures on its outer wall, which become obvious at sunrise.

The "Seagull" near Al-Bakri, and Promentorium Archerusia. (Rukl 35).

At early sunrise, Walter looks almost like a mini-Clavius, with internal craters showing their illuminated rims.

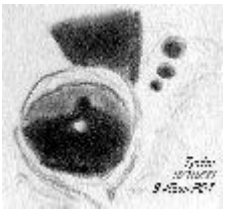


Rima Abulfeda looks like a thin white line running tangent from one wall of Abulfeda to the opposite wall of Almanon.

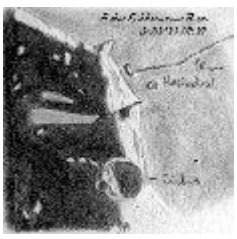


9/18/99 at Fremont Peak, I was watching the lovely early sunrise in Clavius, when I noticed Pitatus fully lit and adjacent Hesiodus completely dark. "I think we're going to get a chance to see the beginning of the Hesiodus Ray tonight!" I said. I'd never heard a report from anyone who'd seen the ray start, or any report of how it starts -- does it start from the far wall, or from the cleft near Pitatus?

The answer is, it starts as a narrow piece of light projected onto the far wall of Hesiodus, then grows into a small triangle which progressively lengthens toward Pitatus.

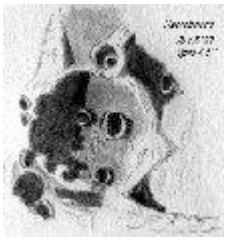


9/18/99 at Fremont Peak, Tycho (left) and Moretus (right) were both right on the terminator. It was fun to see the shadows cast by their central peaks.

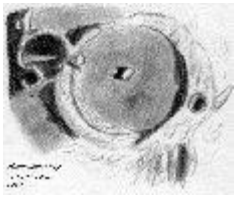


8/20/99, at the SJAA public star party at Houge Park, we were entranced by a lovely pair of rays in Palus Epidemiarum. I made this sketch with my VX102 refractor (then flipped it later to match with the map view), but in a nearby 10" reflector, interesting detail was visible, barely illuminated by the rays, on the floor of Palus Epidemiarum.

Sacrobosco is lovely at sunrise.
8/17/99, though a 4.5" Newtonian.



Sometimes you have to make do with available materials. Looking through Jane Houston's "Red Dwarf" scope after the SJAA meeting on 7/24/99, we were struck by the appearance of Schickard on the terminator. Unfortunately I didn't have my sketching stuff, nor time to do a real sketch, so I threw together a line drawing with a pen on the back of the current newsletter. I turned it into a pencil sketch when I got home later that night.



7/21/99: I finally had a chance to sketch the Hesiodus Ray! This sunrise ray is one of the phenomena which got me into moon-watching; the first "target" I tried to find on the moon. I've looked at late Hesiodus rays many times since then, but this is the earliest and slimmest I've ever seen it -- so of course I had to make a sketch.

5/27/99, 10:45pm: an extremely bright spot in the darkness near Schroter's Valley was so much brighter than anything nearby that it sparked the lunie's perrenial hope: A New Impact! But it was probably just the little dome shown on Rukl's sketch near the crater Freud.

May 21, 1999, 10pm, with a 4.5" Newtonian: interesting broad dark stripe in the area of Rimae Plinius, leading across Mare Nectaris to a dark area in the adjoining terrae. The dark area gave an illusion of a gradual step down from Plinius to the Serpentine Ridge area. In Rukl the dark stripe looks like an albedo feature. Also note the interesting very white patch in the terrae around a small crater, Clerke, adjoining the dark area in the terrae.

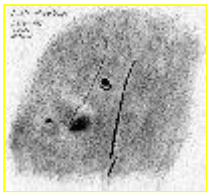
The Serpentine Ridge was also presenting a nice view.

April 24, 1999 SJAA Houge Park star party: David North noticed a transient shadow near the Straight Wall which he'd never seen before, and neither had I. There's no hint whatsoever of this feature on Rukl's chart 54, and even the Times Atlas didn't seem to show it, though it showed a rille there, Rima Lassell, which at least went in the right direction.

My sketch was made using a VX102 refractor at about 150x, but the image has been flipped digitally to match a chart or reflector view.

A search through several other books and finally found a trio of drawings in Harold Hill's "A Portfolio of Lunar Drawings" which matched my sketch almost exactly; apparently it's a rare feature which is only visible when the light is just right. Hill thinks it's a fault scarp, but it's much less prominent than the Straight Wall.

3/21/99: pulled out the 6" f/8 dob for a quick look at the crescent moon before dinner, and saw a beautiful crater on the terminator at the south end of Nectaris: Fracastorius. Over the next ten minutes as I sketched, nearby Piccolomini's borders started to emerge out of the darkness beyond the terminator. (A sketch of the Piccolomini and southern Nectaris area in sunset light appears later on this page.)

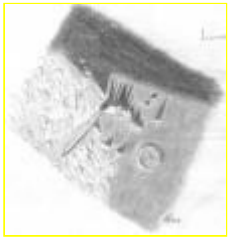


But while I sketched Fracastorius, I scanned other areas of the moon, and realized to my surprise that I was seeing the Cauchy Hyperbolas! The Hyperbolas are Rupes and Rima Cauchy in Mare Tranquilitatis. Rukl has a nice photo of the area, and I had tried to see the hyperbolas before, but although I'd seen the Rupes (in both morning and evening lights), the Rima is very elusive unless the light is just right, and I'd never been able to see it before.

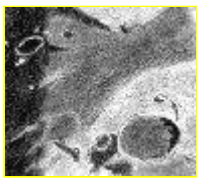
I'm told that spring is the best time to see these, since that's when the moon is highest when the light is best for this area.

On 12/31/98, I noticed a sharp, thin line extending from Riccioli to the nearby crater Rukl marks "B". It looked a bit like the Straight Wall in some lights, and was so sharp I initially thought it was a shadow, but several hours later it was still there, though less sharply defined; a shadow would have shortened in that time.

This feature isn't indicated at all in Rukl. The Times Atlas goes as far as the crater "B", and there *might* be a ridge extending from that crater in the right direction, but so little of it is visible that it's difficult to tell; the atlas doesn't have a page for the area around Riccioli, unfortunately.



On Christmas 1998, I brought along my little 80mm f/7 refractor to show the moon, Saturn and Jupiter to family members. Later in the evening, the party got boring (everybody clustered around the TV switching between football and golf) and I wandered outside to play with two of my presents, a new set of sketching pencils and a 5mm Takahashi LE eyepiece (Taks are wonderful planetary eyepieces!) The jagged shadows from the Alps were very striking that night. I couldn't see the Alpine Valley Rille in the little 80, of course.



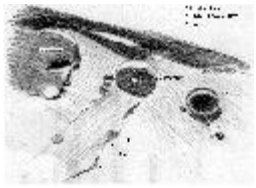
Plato and Fontenelle. Fontenelle is the one with just its rim illuminated. Image flipped after scanning to match the "real" view.

Schiller at sunrise.

On the night of July 29, 1998, observing at 112x from Redwood City with my 80mm f/7 refractor, Alexander's western wall extended out into the darkness (left). Above Alexander are **Eudoxus** and Aristotles.

Half an hour later, Julius Caesar (right) also stood out, along with the prominent gash of a valley just to the crater's north, which was still in darkness. The apparent crater just beginning to peek into the light to the south of Julius Caesar isn't shown clearly at all on Rukl's chart 34; I'm not sure what it is.

Just south of Julius Caesar, the forked tip of Rima Ariadaeus was just beginning to poke into the sunlight; but it was very difficult to see in the 80mm (much easier in a nearby 130mm Fluorite) and is not depicted on the sketch. A thin black shadow extended from the east (perhaps from a peak on the edge of the crater Ariadaeus E) to align almost exactly with the rille, making it even more difficult; alas, I did not have time to sketch the view in the 130mm as the moon was rapidly descending into the poor seeing of a cloudbank.



On 6/14/98, about three days after full moon, I caught sunset over Mare Nectaris. The shock ring from the Nectaris impact (which includes the Altai Scarp) was very prominent, as was Piccolomini, and in addition, south of Piccolomini, Stiborius showed up as an interesting double ring of shadow with a lovely sunset ray streaming through.

On 7/5-6/98, playing with a new toy, an 80mm f/7 refractor, I noticed an interesting partially-shaded ray of light in still-dark Schickard.

Another view of Schickard on the terminator -- 3/29/1999 at 8pm PST, with a Tak FS128. I got an I/O error trying to upload the larger image; will upload it later.

In June and August, '97, when a favorable libration brought the Orientale Basin into view, I made two sketches of the area. I also have a labelled version of the sketch at left.

A year later, on July 8, '98, was an even better showing of Orientale. The triple rings around the impact basin were clearly visible, and Maunder with its huge central peak, as I'd seen a year earlier in the sketch at left, was again very prominent. Rukl doesn't show Maunder's central peak being at all like this.

June '98, it was cloudy on the best night for **Orientale**, but then clear the next night (when the libration was better, anyway) so I tried identifying craters and maria on the limb. I used my VX102 refractor; on the limb of the moon, the color error in the achromat is very noticable, so I played around with filters. I don't have a minus-violet, but an orange filter helped tremendously; a light yellow didn't help nearly as much. Note that this image is mirrored to match the real moon.

Birt, Birt A, and the Straight Wall, at sunrise. This is the first sketch I made which I really liked.

9/18/99 at Fremont Peak, sunrise in Clavius was earlier than I'd seen it before.

Charcoal pencil sketch of the progress of sunrise over Clavius. March 7, 1998. 80mm Vixen achromat, 5mm eyepiece.

Pencil sketch of the progress of sunrise over Clavius.

Another sunrise over Clavius, this time fighting clouds on May 4, 1998 with a VX102 and a 9mm eyepiece.

While looking for the Burnham sunrise ray, I became lost and found a ray coming out of the crater Vogel instead.

Other sketches:

- My general (non-lunar) sketch page
- Lost in a Northern Libration (the moon's north polar region)
- The gaps in Saturn's rings

Akkana's Astronomy page
Akkana's Home Page (Photography, bicycling, auto racing, motorcycles, etc.)
mail comments