

AN INDEPENDENT NEWSLETTER FOR STUDENTS OF THE MOON . . . FEBRUARY 2003 EDITED BY: Bill Dembowski - Elton Moonshine Observatory 219 Old Bedford Pike (Elton) - Windber, PA 15963 - <u>DEMBOW@TWD.NET</u>

FEATURE OF THE MONTH



HORROCKS & PICKERING (4.0°S – 5.9°E / 2.9°S – 7.0°E) Text and Sketch by Robert H. Hays, Jr. – Worth, Illinois, USA July 30, 2002 – 15cm Newtonian – 170X – Seeing 6-8/10

I sketched these two craters and vicinity on the morning of July 30, 2002 after timing four occultations. Horrocks is the larger of these two. It has a small peak off-centered toward the southwest, and three bright patches toward the east. The most northerly of these patches may have had a slight shadow effect. The rim of Horrocks is reasonably circular except for a pronounced point on its east side. A short, curved ridge adjoins the west edge. The interior southwest wall of Horrocks shows some evidence of terracing. The modest crater southwest of Horrocks is Hipparchus N with smaller Hipparchus NA to its east, and south of Horrocks. The area south of Horrocks otherwise appeared quite smooth; this area is actually within the large broken ring Hipparchus. The area north of Horrocks was quite different. There are hills of varying sizes and shapes that were sketched as I saw them. These are part of the north rim of Hipparchus. East of these hills is the crisp, round crater Pickering. This crater showed a bright sunlit area and considerable interior shadow, more so than Horrocks. South of Pickering is a group of hills and ridges, some of which may form a ghost ring. (The Lunar Quadrant Map does indicate a ghost ring there.) Those elevations appeared to have darker shadowing than those farther west. Farther south, and east of Horrocks was a large, low hill that was probably also part of the rim of Hipparchus. A small, bright spot was seen on its edge closest to Horrocks.

Received During the Month

MICHAEL AMATO - WEST HAVEN, CONNECTICUT, USA Ray maps of Menelaus (3), Messier (2), Proclus (3)

P. J. ANWAY – MUNISING, MICHIGAN, USA CCD Image of Copernicus (Cave)

ED CRANDALL - WINSTON-SALEM, NORTH CAROLINA, USA CCD Image of Schicard & Phocylides & Schiller

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO CCD of Dome within Darwin, Seleucus and ray, Rupes Recta at sunset, Atlas Companion, Mare Humboldtianum, Rupes Recta, Aristillus Sketch of Rumker

COLIN EBDON - COLCHESTER, ESSEX, ENGLAND Sketches of Babbage & Pythagoras, Darwin

PETER GREGO – REDNAL, BIRMINGHAM, ENGLAND Sketch of Franklin

K. C. PAUL – HONG KONG, CHINA CCD of Alpine Valley

ROBERT WLODARCZYK - CZESTOCHOWA, POLAND Sketch of Reiner & Reiner Gamma

LUNAR CALENDAR - FEBRUARY 2003 (UT)

- 01 ... 10:50 ... New Moon (Start of Lunation 991)
- 07 . . . 22:00 . . . Moon at Apogee (251,377 miles 404,541 km)
- 09 . . . 11:12 . . . First Quarter
- 12 . . . 02:00 . . . Moon 2.6 Degrees N of Saturn
- $16 \dots 23:52 \dots$ Full Moon
- 19....16:00.... Moon at Perigee (226,704 miles 364,835 km)
- 23 . . . 16:47 . . . Last Quarter
- 25 . . . 04:00 . . . Moon 1.9 Degrees S of Mars

Just as deep sky observers look for interesting objects between the stars, lunar observers can find many treasures BETWEEN THE CRATERS



KIES & KIES PI – (Rukl Map 53) Sketch by Colin Ebdon – Colchester, Essex, England November 9, 1997 – 10 inch Newtonian – 183X–262X

Text by Bill Dembowski

In the southwest corner of Mare Nubium is the easily recognizable flooded crater Kies. (One of my personal favorites.) Between Kies and the crater Campanus to its southwest is the classic dome, Kies pi. If you have never seen a lunar dome, this is an excellent place to start. Kies pi has a height of 145 meters (483 ft.), which makes it nearly the exact height of the Great Pyramid of Khufu (or Cheops, if you prefer) in Egypt. It's diameter of 13km (8 miles) however, make for a much gentler slope than the Pyramid which measures only 230 meters per side.

There is still some question as to the origin and nature of lunar domes. Some believe that they are nothing more than small mountains, while some hold to the theory that they are true volcanoes. Most experts, however, line up under the banner of "Volcanic swellings in the crust caused by magma buildup." In any case, the correct theory must take into account the central summit craters which are present in many (greater than chance) domes including Kies pi.

As you observe Kies pi and ponder which of the above three models it most resembles, don't forget to have some fun and put on your 19th century thinking cap. Famous lunar observer, Johann Shroeter (1745-1816) was so convinced the Moon was inhabited, that he attributed domes to "the industrial activity of the Selenites". If you come to the same conclusion, you are having entirely too much fun

TOPOGRAPHICAL STUDIES



<u>FRANKLIN</u> Sketch by Peter Grego – Rednal, Birmingham, England October 23/24, 2002 – 127mm MCT – X200



COPERNICUS

<u>(Showing the Copernicus Cave on wall at top center)</u> Video Still by Patrick Anway – Munising, Michigan, USA March 27, 1999 – 11 inch SCT w/2X Barlow – Astrovid Camera