

AN INDEPENDENT NEWSLETTER FOR STUDENTS OF THE MOON AUGUST 2000 EDITED BY: Bill Dembowski - ALPO Coordinator, Lunar Topographical Studies - President, American Lunar Society 219 Old Bedford Pike - Windber, PA 15963 - <u>DEMBOW@TWD.NET</u>

FEATURE OF THE MONTH



HARPALUS - (52.6^oN - 43.4^oW) Sketch and Text by Robert H. Hays, Jr. - Worth, Illinois, USA 6 inch (15 cm) Newtonian - 170X - Seeing 6-7/10

I observed this crater on the evening of January 18/19, 2000 while timing the occultations of eight stars, the last and brightest being Chi-2 Orionis. This also was two nights before the total lunar eclipse. Harpalus is located in Sinus Roris north of Sinus Iridum. It has a large, rather low central mound and terracing on its walls. I did not see any craters nearby, but there were several isolated peaks.

Harpalus xi is relatively low, while Harpalus gamma is obviously taller. The latter peak was nearer to the terminator, but I don't think that this completely accounted for its longer shadow. A smaller mound is near Harpalus xi. All of the aforementioned peaks are northwest of Harpalus itself. Harpalus lambda is southeast of Harpalus. The Lunar Quadrant Maps show it as a single, but it is definitely a double peak. The crater Foucault is to the south. This crater is at the edge of Sinus Roris. The northwest rim of Foucault appears to drop sharply down into the bay. At least two ridges in this area mark the boundary of Sinus Roris.

Editor: Harpalus is a 39km (24 miles) crater named for a Greek astronomer (c. 460 BC). It can be found on Map #2 of Rukl's Atlas of the Moon.

LUNAR CHALLENGE

In the May issue of TLO, Daniel del Valle of Aguadilla, Puerto Rico made an observation of an interesting but unnamed feature near the crater Atlas. He called for additional observations and Robert Wlodarczyk of Czestochowa, Poland rose to the challenge (June TLO). Since then, both observers have returned to this fascinating feature and have independently come to the same conclusion; that the feature is more than just a bright patch. First, Robert Wlodarczyk:



July 6, 2000 - 19:45 UT - 180mm Newtonian - 140X-240X

<u>ROBERT'S COMMENTS:</u> I am sending you my new observation of a bright feature near crater Atlas. It seems not like a starlike structure but rather like a bright plateau.

Daniel del Valle came to the same conclusion and took it a step further:



DANIEL'S COMMENTS: My latest observations have made me revise my original idea about the bright lunar feature near Atlas which you highlighted in the May TLO. My original estimation was that the feature was a bright crater. The crater itself is not very visible. It gets lost in the noise of the bright rays. Then, on 21 May, I was surprised to see a structure with some relief, the bright rays were not visible. On the basis of this observation I took the risk of speculating what this feature's appearance might look like from ground level. The sketch included is the result. I want to emphasize that his feature would probably go without notice if it were not for its brightness. I consider it one of the brightst features of the Moon alongside Cassini's Bright Spot and the crater Aristarchus. As part of the Bright Lunar Rays Project it merits more study. I'm not even sure yet if this feature really has bright rays, or if it is simply a hillock made of bright reflective material.

<u>EDITOR</u>: Thanks to Daniel and Robert for their fine observations. This is what amateur lunar observing is all about. It may not be "cutting-edge" science but it is still science; we are learning first-hand about the universe around us and having fun doing it. Keep up the good work all you lunar observers; you are observing and recording sights that are impossible to find in published literature you are the greatest!

RECEIVED DURING THE MONTH

MICHAEL AMATO - WEST HAVEN, CONNECTICUT, USA Sketches of Plato, Proclus Rays (3), Menelaus Rays (3), Messier Rays (3), Aristarchus Rays (2)

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO

Sketches of Lambert, Cook, Unnamed feature near Atlas, Nasireddin Huggins & Orontius, le Verrier & Helicon, Billy & Mons Hansteen, Reiner & Reiner gamma, Cardanus & Kraft, Geminus, Plato Ray Map of Menelaus

PETER GREGO - REDNAL, BIRMINGHAM, ENGLAND Sketch of Janssen

JOSEPH LIU - SALINAS, CALIFORNIA, USA Photographs of Darwin & Rimae Sirsalis, Julius Caesar & Rima Ariadaeus

HARRY PULLEY - GUELPH, ONTARIO, CANADA CCD images of Messier (5), Proclus (3), Stevinus A

ROBERT WLODARCZYK - CZESTOCHOWA, POLAND Sketches of Plinius, Unnamed feature near Atlas

LUNAR CALENDAR - AUGUST 2000 (UT)

- 7...01:02...First Quarter
- 11....22:00.... Moon at Apogee (252,060 miles 405,640 km)
- 15 . . . 05:14 . . . Full Moon
- 22 . . . 18:51 . . . Last Quarter
- 27...14:00... Moon at Perigee (224,878 miles 361,896 km)
- 28 . . . 03:00 . . . Moon 0.9 Degrees N of Mars
- 29 ... 10:20 ... New Moon (Start of Lunation 961)

LUNAR OBSERVING TIPS



JANSSEN - Peter Grego - Rednal, Birmingham, England March 23, 2000 - 250mm Newtonian - 125X-190X

Peter Grego achieved the sketch (above right) by first imaging the area with a Casio QV-11 CCD camera then printing at a large scale and intentionally low contrast (above left). He then used the printout of the image as an observing blank over which the final drawing was made. An excellent use of both hi-tech and traditional methods of recording the Moon's surface.

TOPOGRAPHICAL STUDIES



AREA AROUND CAPELLA & ISIDORUS Harry Pulley - Guelph, Ontario, Canada July 7, 2000 - 200mm Catadioptric - SBIG ST-5C Camera



<u>CLAVIUS & TYCHO</u> Michael Mattei - Littleton, Massachusetts, USA - March 15, 2000 6 inch (150mm) Schupman - Cookbook 211 CCD Camera