

A NEWSLETTER FOR STUDENTS OF THE MOON ..... FEBRUARY 2000 EDITED BY: Bill Dembowski - ALPO Coordinator, Lunar Topographical Studies - President, American Lunar Society 219 Old Bedford Pike - Windber, PA 15963 - DEMBOW@TWD.NET

# FEATURE OF THE MONTH



#### BAILLY - (66.8°S - 69.4°W) Sketch and Text by Robert H. Hays, Jr. - Worth, Illinois 6 inch (150mm) Newtonian - 136X - May 29, 1999 - Seeing 4-5/10

I observed this large ruined crater on the evening of May 28/29, 1999 after timing the occultation of 4 th magnitude star Gamma Librae. The moon was about 28 hours before full. Bailly is normally very near the southern limb, but the latitude libration was favorable that evening for this crater. The best description that I can think of for Bailly is a large walled plain open on the north end. I saw at least 10 craters on its floor or walls with varying degrees of size and definition. The largest is Bailly B near the southern end with Bailly A alongside it on Bailly's rim. There were a number of elongated features which the sketch shows better than I could describe with words. One conspicuous ridge protruded out of the darkness beyond Bailly's west wall. The floor of Bailly was darker toward the terminator, probably due to lunar curvature. I could not see any indication of a north wall of Bailly. The east and west walls sort of petered out, and the floor of Bailly blended into chaotic terrain to the north which I did not draw.

Editor: Bailly was named for Jean Sylvain Bailly (1736-1793) a French astronomer. Sometimes referred to as a walled plain, Bailly is the largest ringed formation on the Moon other than the maria. With a diameter of 300 km (186 miles) it is nearly as large as Mare Nectaris (350 km, 217 miles). Only its proximity to the lunar limb prevents it from greater recognition.

Bailly can be found on Map #71 of Rukl's Atlas of the Moon and should not be confused with the small crater Baily shown on Map #6. Robert Hays sketched this area two nights before Full Moon.

## LUNAR CALENDAR - FEBRUARY 2000 - (UT)

- 1....01:00.....Moon at Apogee (252,033 miles 405,597 km)
- 5....10:56.... Partial Solar Eclipse Begins (Antarctica)
- 5 . . . . 13:04 . . . . New Moon (Start of Lunation 954)
- 11....05:00.... Moon 4.2 Degrees SSE of Jupiter
- 12....02:00.... Moon 3.0 Degrees SSE of Saturn
- 12.... 23:21.... First Quarter
- 14. . . . 03:00. . . . Moon 1.2 Degrees NNW of Aldebaran
- 17.... 08:00.... Moon at Perigee (226,486 miles 364,484 km)
- 19. . . . 16:27. . . . Full Moon
- 27.... 03:55.... Last Quarter
- 28....21:00.... Moon at Apogee (251,416 miles 404,604 km)



Map used with permission of Lunar & Planetary Laboratory, University of Arizona

This month's exploration takes us to a wonderful cluster of craters comprised of Fra Mauro, Bonpland, and Parry. Begin your exploration by closely examining the manner in which the crater walls are superimposed upon one another. This will reveal that Fra Mauro is the oldest of the trio, with Parry being the youngest. In addition to age, this is also the order of their sizes. Fra Mauro (95 km, 60 miles) being the largest, then Bonpland (60 km, 37 miles), and finally Parry (48 km, 30 miles). Keep in mind that this three crater cluster can be difficult to locate under even a moderately high sun. Look for it when it is within two days of the terminator, about nine days after New Moon.

Fra Mauro has a heavily ruined rim and a rather large gap in its east wall. Fra Mauro shares its southern wall with both Bonpland and Parry who are also connected by common ramparts. Look for a nearly centrally located crater (Fra Mauro E) that marks the southern end of a rille that runs north through Fra Mauro's very degraded north wall and beyond. To the south of Fra Mauro E is a pair of rilles. One runs south into Parry, skirts its western wall, and proceeds beyond the cluster to terminate in a nearby crater, Tolansky. The second in this pair of rilles runs south into Bonpland. The floor of Bonpland is noticeably darker than that of Fra Mauro. Observe how a patch of dark Bonpland-like material on the floor of Fra Mauro marks the spot where this rille connects the two craters. Did lava from the flooded floor of Bonpland flow through the break in the wall and spread onto Fra Mauro's floor? Finally, as the sun rises above Parry, look for a series of bright craterlets on the floor of this youngest member of the trio.

### EXPLORING THE MOON

### RECEIVED DURING THE MONTH

MICHAEL AMATO - WEST HAVEN, CONNECTICUT Sketches of Proculus Rays (3), Menelaus Rays (3), Messier Rays (2)

NATASHA BLY - BOISE, IDAHO Photographs of Tycho Rays, Eudoxus & Aristoteles

KAILANI BURLEY - BOISE, IDAHO Photograph of Full Moon

JUSTIN FOROMOLO - BOISE, IDAHO Photograph of Lunar Quadrant Two

PHIL PLANTE - BLAND, OHIO Written account of Total Lunar Eclipse

WILL SCOTT - BOISE, IDAHO Photographs of Full Moon (2), Mare Humorum, Eudoxus & Aristoteles

KELLEN WALLIS - BOISE, IDAHO Photographs of Mare Humorum, 6-Day Old Moon

## TOPOGRAPHICAL STUDIES



<u>MARE IMBRIUM</u> Video Still by Giuseppe Sorrentino - Italy June 24, 1999 - 8 inch (200mm) SCT - f/10 with focal reducer 0.5X W25 Filter - TC398 Video Camera



#### EUDOXUS & ARISTOTELES Photograph by Will Scott - Boise, Idaho October 15, 1999 - 8 inch SCT - Exp. 1 sec.

EDITOR: Will Scott is one of five students at Nampa Sr. High School in Boise, Idaho that submitted observations this month. Under the guidance of Mr. Fred Johnson this group of young adults is actively observing the Moon and participating in the International Bright Lunar Rays Program. All are to be commended for their efforts.



<u>MARE SERENITATIS</u> Video Still by Davide Zompatori - Italy 200mm (8 inch) Newtonian at f/6