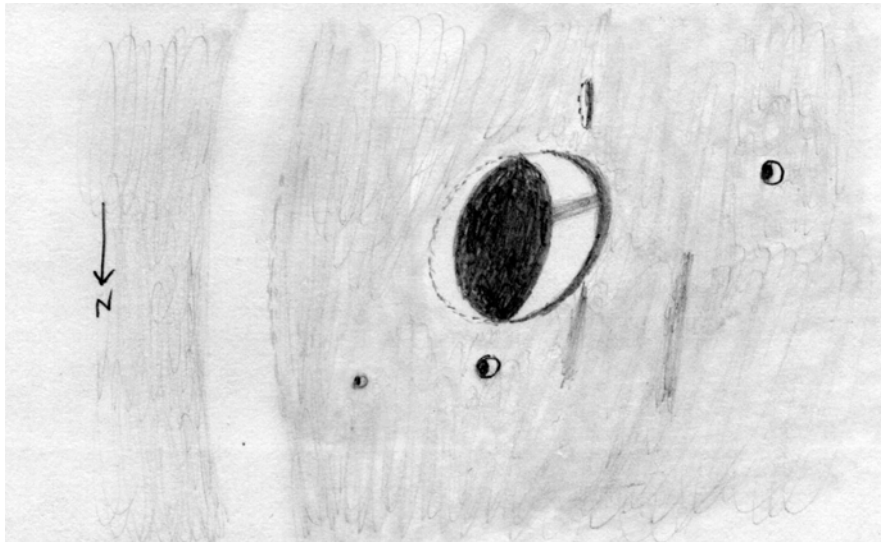


THE LUNAR OBSERVER

A NEWSLETTER FOR STUDENTS OF THE MOON DECEMBER 1999
EDITED BY: Bill Dembowski - ALPO Coordinator, Lunar Topographical Studies - President, American Lunar Society
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FEATURE OF THE MONTH



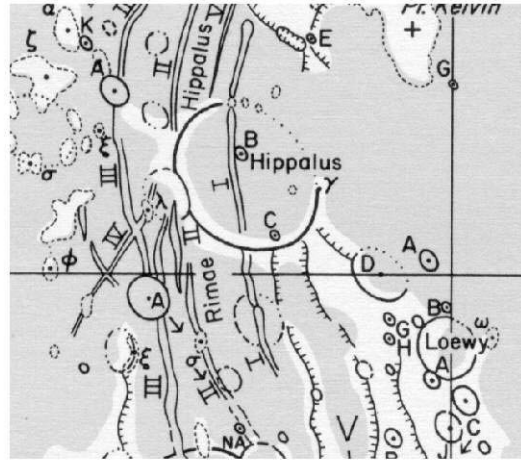
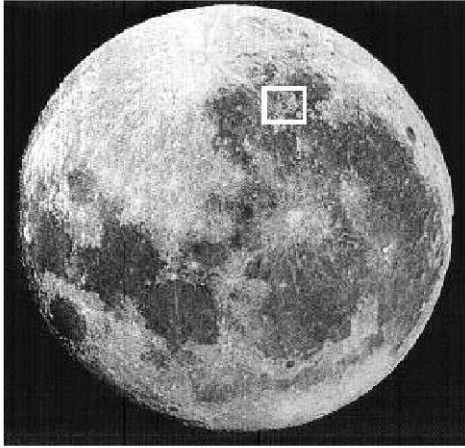
PYTHEAS - (20.5°N - 20.6°W)

Sketch and Text by Robert H. Hays, Jr. - Worth, Illinois
6 inch (150mm Newtonian) - 170X - July 23, 1999 - Seeing 6/10

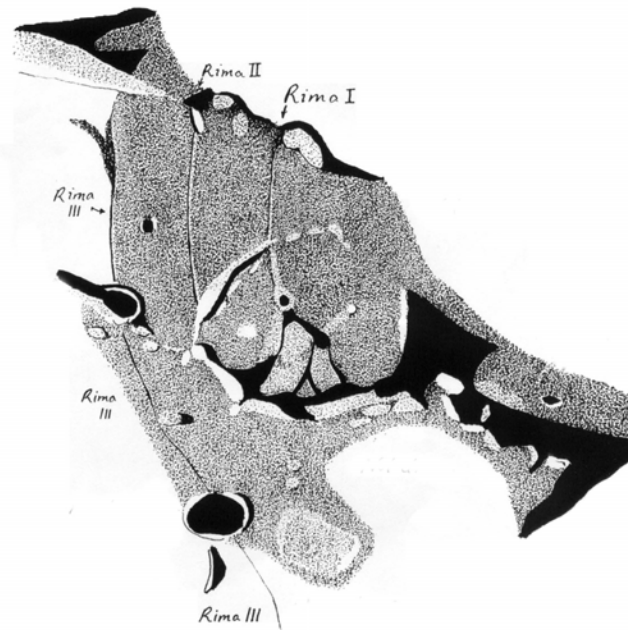
I observed this crater on the night of July 22/23, 1999 shortly before the Moon occulted 7 th magnitude ZC 2280. This was a pretty simple crater except for a dusky strip of shadow that cut across the southern part. Pytheas A was to the west of Pytheas, while Pytheas D was to the north. A much smaller crater pit was noted east of Pytheas D. A short ridge was south of Pytheas, and two wrinkles were seen to the north and west. A sharply defined ray, probably from Copernicus, passed east of Pytheas. This ray was not straight, but was slightly curved, almost as if it was being deflected to bypass Pytheas.

Editor: Pytheas is a 20 km (12 mile) crater named for Pytheas of Massalla (230 BC), a Greek navigator who linked the Moon to the tides. Pytheas can be found on Map #20 of Rukl's Atlas of the Moon. Robert made this sketch two nights after First Quarter. We would like to thank Robert for his continued contributions to The Lunar Observer. His sketches and written observations are a key component to the popularity and success of this publication.

EXPLORING THE MOON



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



Hippalus Rille System

Sketch & Text by Colin, Ebdon - London, England

December 28, 1998 - 10 inch Newtonian - 236X

Both Rukl and The Times Atlas show several additional rilles which were not evident during this observation, in particular a wider and more shallow rille between Rima I and II. Rima I passes through Hippalus itself, skirting the small off-centre crater Hippalus B (in shadow in this drawing).

This aside, the web of shadows to the north and west of Hippalus in this drawing do not seem to indicate a system of rilles, but are probably caused by a combination of ridges and small craterlets. It must be said that the detail on the floor of Hippalus generally as depicted in this observation could not be reconciled with that shown in either atlas.

The system of rilles as a whole is very extensive; Rima I, II, and III continue in long curving arcs, concentric with Mare Humorum. The object on the mare floor, midway between Rima II and III in this drawing, appears to be a flooded crater with only the east and west walls still visible.

RECEIVED DURING THE MOON

MICHAEL AMATO - WEST HAVEN, CONNECTICUT

Sketches of Messier Rays (2), Menelaus Rays (2), Proclus Rays (2)

DANIEL DEL VALLE - AGUADILLA, PUERTO RICO

Sketches of Bettinus, Timocharis, Seleucus Rays (3)

PETER GREGO - BIRMINGHAM, ENGLAND

Sketch of Menelaus

GUS JOHNSON - SWANTON, MARYLAND

Sketch of Birt & Rupes Recta

ROBERT WLODARCZYK - CZESTOCHOWA, POLAND

Sketches of Clavius & Maginus, Eratosthenes, Eddington & Struve & Russel

Photograph of Mare Crisium

Lunar Calendar - December 1999 - (UT)

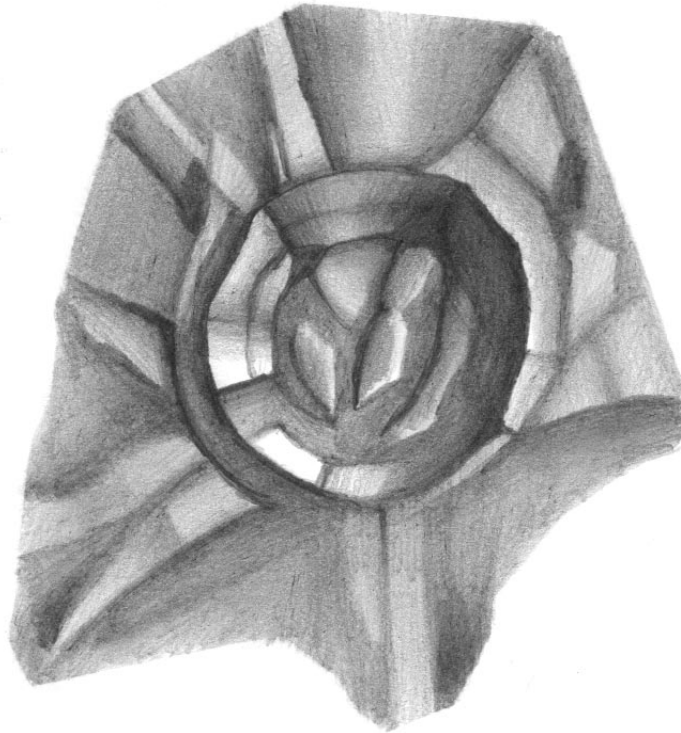
603:00 . . . Moon 2.7 Degrees NNE of Mercury
722:32 . . . New Moon (Start of Lunation 952)
811:00 . . . Moon at Apogee (252,665 miles - 406,614 km)
1122:00 . . . Moon 0.18 Degrees ESE of Neptune
1500:50 . . . First Quarter
1808:00 . . . Moon 3.8 Degrees SSE of Jupiter
1911:00 . . . Moon 2.7 Degrees SSE of Saturn
2109:00 . . . Moon 1.3 Degrees NNW of Aldebaran
2211:00 . . . Moon at Perigee (221,614 miles - 356,643 km)
2217:32 . . . Full Moon
2914:05 . . . Last Quarter

TOPOGRAPHICAL STUDIES



Lunar South Pole

Photograph by Dan Barbiero - Silver Spring, Maryland
July 31, 1999 - 9.25 inch SCT - f/64 - 1/2 sec. - ISO 400



Menelaus

Peter Grego - Birmingham, England
October 26, 1999 - 250mm Newtonian - 250X



Proclus & Mare Crisium

Video Still by Francesco Badalotti - Cremona, Italy
August 3, 1996 - 10 inch SCT