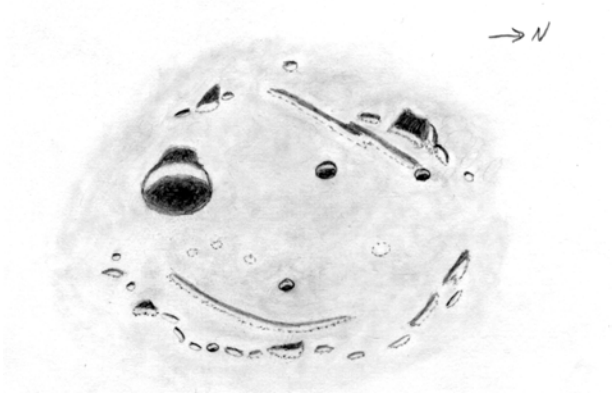
THE LUNAR OBSERVER

A NEWSLETTER FOR STUDENTS OF THE MOON . . . . . MAY 1999
EDITED BY: BILL DEMBOWSKI - ALPO Coordinator of Lunar Topographical Studies
219 OLD BEDFORD PIKE - WINDBER, PA 15963 - DEMBOW@TWD.NET

FEATURE OF THE MONTH



Flamsteed - (4.5°S - 44.3°W)

Sketch by Robert H. Hays, Jr. - Worth, Illinois
15cm Newtonian - 170X - December 30, 1998 - Seeing 6-7/10

On the southwestern portion of Oceanus Procellarum, sitting on the southern rim of an old submerged 100km crater, is the Flamsteed. This 21km crater is named for John Flamsteed (1646-1719) English astronomer and first Astronomer Royal. Robert H. Hays, Jr. sketched the area around Flamsteed and submitted the following report:

"I observed this crater on the evening of December 29/30, 1998, after timing the occultation of a faint star. Flamsteed itself is an ordinary crater except for the shadow cast by its rim. Only the middle of the rim appears to be raised. Flamsteed is surrounded by an assortment of hills. This is the ghost ring Flamsteed P, according to the Lunar Quadrant maps. A few craters were seen on or inside this ring (besides Flamsteed); the largest being Flamsteed D. The largest fragments of the ghost ring are Flamsteed Delta to the northwest, and Flamsteed Gamma close west of Flamsteed. The eastern part of the ghost ring is mostly a curve of low hills with a craterlet thrown in. Two low ridges were noted close inside the east and west edges of the ghost ring."

Editor: Flamsteed can be found on Map #40 of Rukl's Atlas of the Moon. Try observing it about four nights before Full Moon.

RECEIVED DURING THE MONTH

PAUL BRADSHAW - ANCHORAGE, ALASKA
Video Stills of Lunar Quadrant Four, Ten Day Old Moon

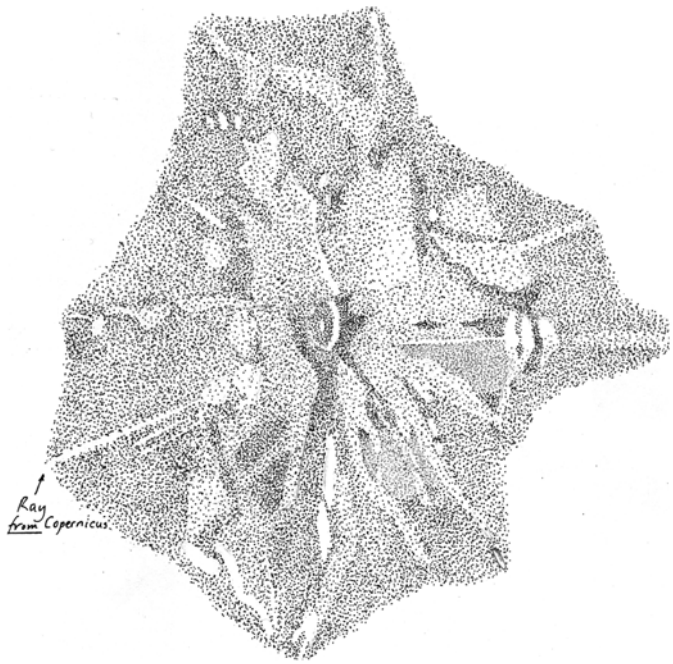
DANIEL DEL VALLE - AGUADILLA, PUERTO RICO
Sketches of Menelaus (3), Messier (3), Tycho, Langrenus, Santbech

COLIN EBDON - LONDON, ENGLAND
Video Stills of Clavius, Sinus Iridum, Mare Crisium, Bullialdus

GILBERT LUBCKE - MIDDLETON, WISCONSIN
CCD Images of Proclus (5)

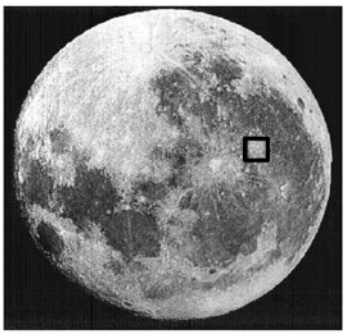
CHARLES SHIRK - DAYTON, OHIO
Video Still of Mare Imbrium

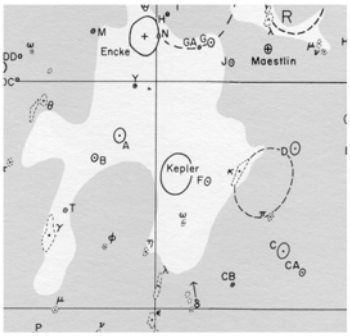
JOINT ALPO/BAA/ALS BRIGHT LUNAR RAYS PROJECT



KEPLER RAY SYSTEM - Sketch by Colin Ebdon - London, England
January 3, 1999 - 00h - 01h UT
25cm Newtonian - 183X-236X - Transparency:Good Seeing:Poor

EXPLORING THE MOON





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

This month's exploration is the ray system of the crater Kepler. The text is taken from the notes of Colin Ebdon of London, England. Colin's sketch of the area appears in the Lunar Rays section:

"The initial drawing of the rays was intended to give an overall impression of the system as a whole under high lighting conditions. As such, the observation is not particularly informative as to detail, of which there is much to be made out under better seeing conditions. Despite the generality of the observation, several things are worth mentioning.

First, notwithstanding the lighting and libratory conditions, and the longitude of Kepler, there seemed to be a distinct bias of rays to the North and West. In addition, the rays gave the impression of being composed of two types of feature; a mottled patchwork of lighter surface markings, having the appearance of 'stains' on the Mare surface, in islands of various shapes and sizes, interposed with darker material. The two largest and most continuous of these patches were the nearest to Kepler. Secondly, and 'overlay' of filimentary-like rays which had the appearance of being ejecta as they are supposed to be. Kepler itself was surrounded by an asymmetrical ring of darker material, except to the Southeast, where what looked like a brilliant 'ridge' of material/ejecta ran off in this direction.

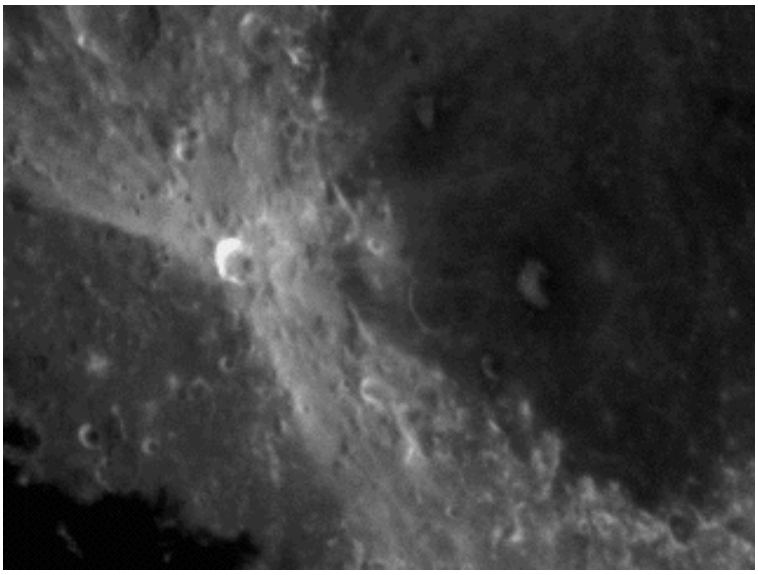
It should be noted that confusion can easily arise as to the extent of the ray system as it intermingles with that of Copernicus at its eastern extremities. To the West, one ray reached within about 100km or so of Reiner Gamma (59°W). Kepler itself is at 30°W. In this drawing, the local solar altitude at Kepler was about 66°. In a previous observation by the author, the rays to the East of Kepler were quite distinct at a local solar altitude of only 12° and could have been detected much earlier than this."

Editor: When exploring this region of the Moon compare your observations to those of the author. A report of the similarities and/or differences would be most appreciated. As always, your sketches, photographs and electronic images are encouraged and welcomed.

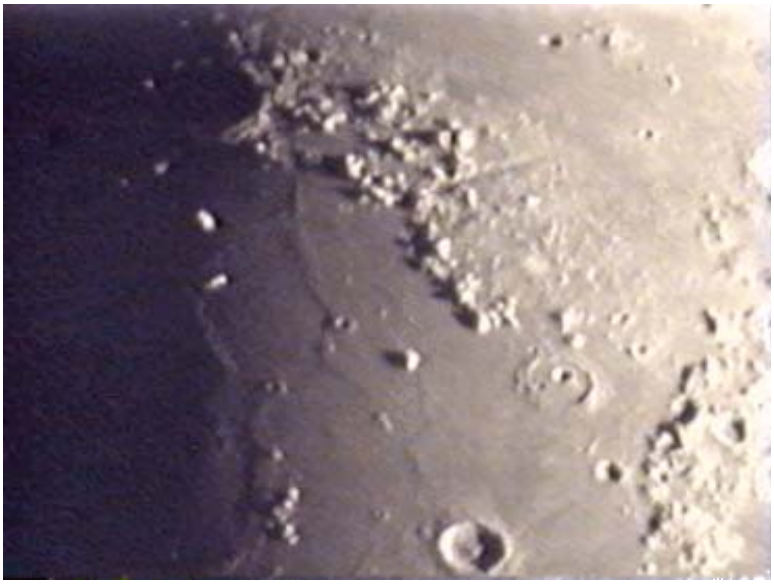
LUNAR CALENDAR - MAY 1999 (UT)

2 . . . . .07:00 . . . . . Moon at Apogee (406,266 km)
8 . . . . .17:30 . . . . . Last Quarter
13. . . . .07:00 . . . . . Moon 3.4 Degrees South of Jupiter
15. . . . .12:05 . . . . . New Moon (Start of Lunation 945)
15. . . . .15:00 . . . . . Moon at Perigee (357,083 km)
22. . . . .03:00 . . . . . Moon 0.7 Degrees North of Regulus
22. . . . .05:33 . . . . . First Quarter
29. . . . .08:00 . . . . . Moon at Apogee (406,387 km)

TOPOGRAPHICAL STUDIES



PROCLUS
CCD Image by Gilbert Lubcke - Middleton, Wisconsin
April 5, 1998 - 02h 13m 55s UT - 11 inch SCT - f/10 - ST5 CCD - 0.07 sec.



MARE IMBRIUM
Video Still by Charles Shirk - Dayton, Ohio
September 28, 1998 - 23h 28m UT - 10 inch SCT - f/10