

NO. 9 PRELIMINARY DRAWINGS OF LUNAR LIMB AREAS, II

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April 13, 1962

1. Introduction

THIS paper is the second of six intended to present a total of 12 drawings of limb areas of the moon, which are to supplement the photographic *Rectified Lunar Atlas* now in preparation.

The present two drawings extend the east lunar limb (astronautical direction) from 30° north latitude to the north pole. They were based on suitable rectified photographs, using the best available photographs as supplementary reference material. This method was fully described in *Communication* No. 4.

Areas 2 and 3 were combined to facilitate the interpretation and representation of detail. They were drawn with the apparent illumination coming from the east (astronautical direction) instead of from behind the limb (cf. *Comm.* No. 4). Since the plates are orientated to maintain consistency in the position of the limb, the apparent direction of illumination adopted is from the bottom instead of from the side.

Two modifications have been introduced into these drawings compared to the earlier pair: (a) east and west have been inverted to conform to standard cartographic or astronautical directions; this procedure will be adhered to in the future; and (b) a dotted circle is sometimes used to depict craters not well shown on the photographs. Crater forms are therefore represented by two stylized symbols instead of the single one used previously. As before, those details are omitted from the drawings for which an identification cannot be made with reasonable certainty. Such features will be added whenever visual examination of the areas becomes feasible.

2. Notes on the Accompanying Plates

Plates 9.1 and 9.2 are key charts to Area 9 and Areas 2 and 3 (combined). They are inserted for identification and comparison and because they have an approximate longitude and latitude grid at intervals of 10° and the nomenclature of named features is given.

Areas 2 and 3 (combined, Plate 9.4) cover the east limb (astronautical direction) from 60° north latitude to the north pole. It was drawn with Lick photograph No. 172 (rectified) used as a base. Other reference photographs were rectified prints of Yerkes photographs Nos. 65, 160, 482, 706, 733, 738, 822, 1335, 1339; McDonald photographs Nos. 10, 28; Lick photographs Nos. 175, 186; Mt. Wilson photographs Nos. 90, 124; as well as unrectified prints of McDonald photographs Nos. 28, 30; and Yerkes photograph No. 482.

Area 9 (Plate 9.6) covers the east limb (astronautical direction) from 30° to 60° north latitude. The drawing was made with Yerkes photograph No. 781 (rectified) and Lick photograph No. 175 (rectified), used as bases. Other reference photographs were rectified prints of Yerkes photographs Nos. 738 and 781; Lick photographs Nos. 172, 175, 186, and 237; McDonald photograph No. 30; Mt. Wilson photograph No. 341; as well as unrectified prints of Yerkes photographs Nos. 482, 686, 781, and 928; and McDonald photographs Nos. 30 and 479.

Three of the reproductions of the earlier paper, Plates 4.3, 4.5 and 4.8 were not entirely satisfactory. New reproductions of Areas 15 and 21 are herewith included.

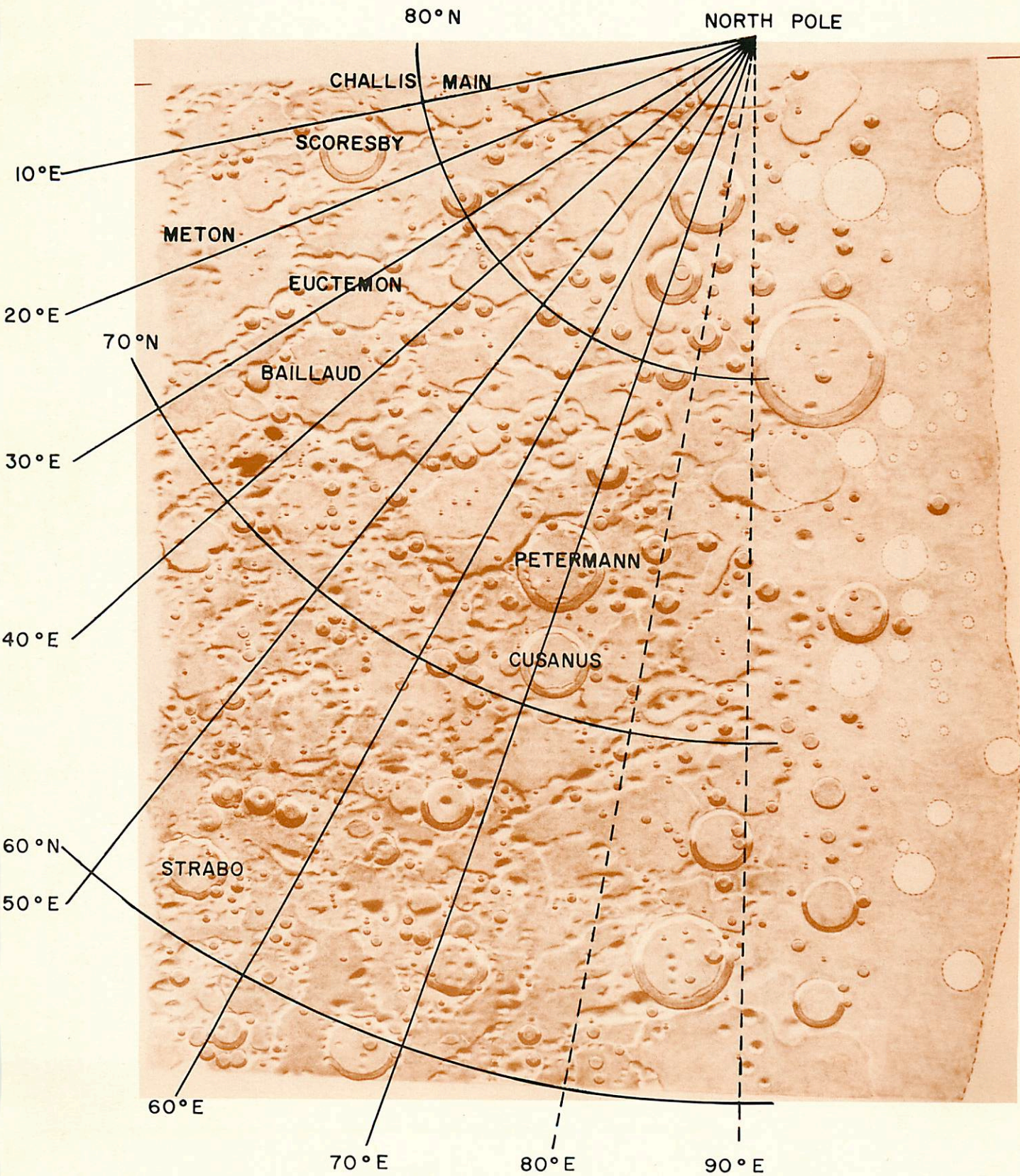


Plate 9.1. Key chart to Areas 2 and 3 (combined).

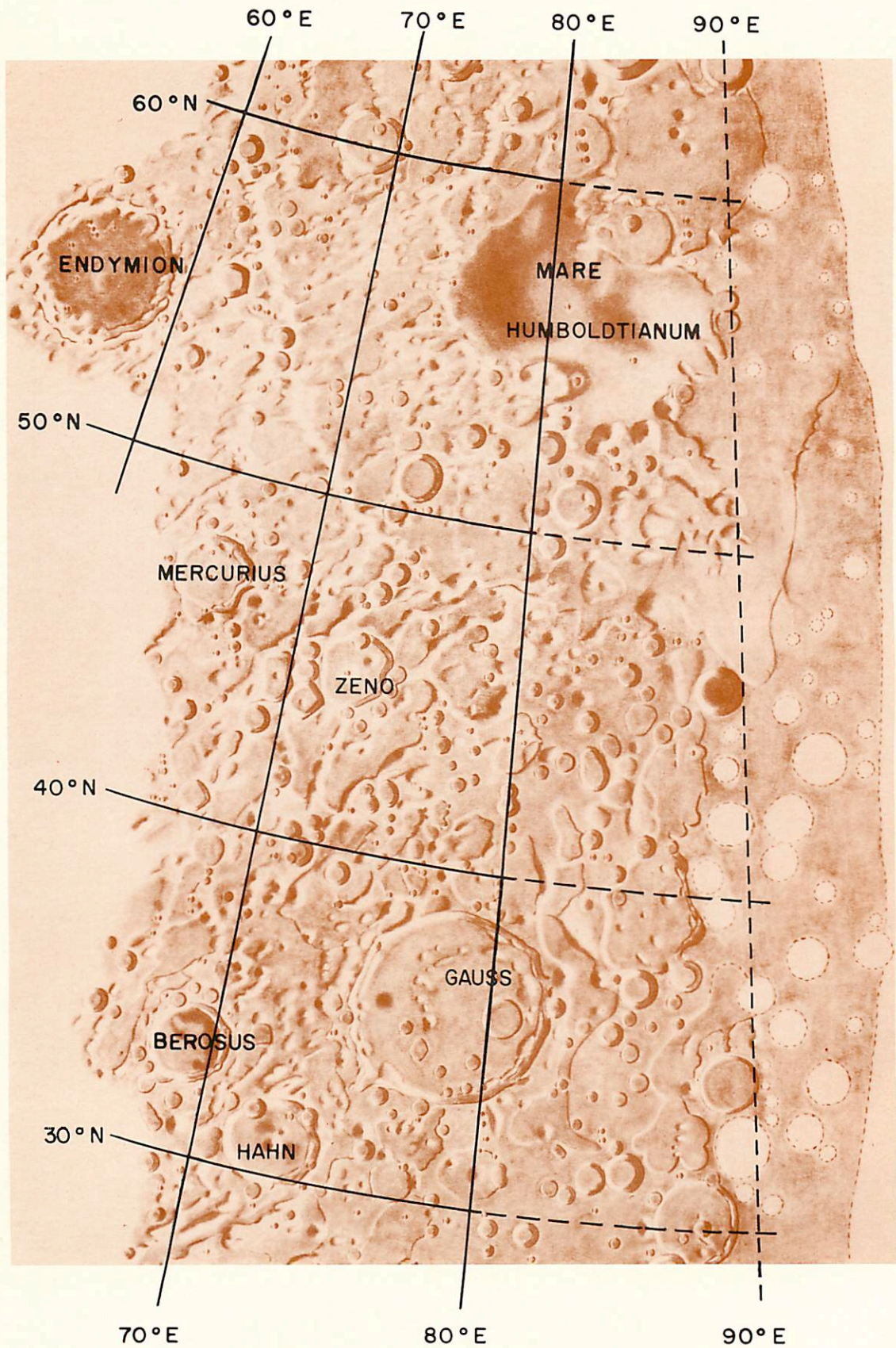


Plate 9.2. Key chart to Area 9.

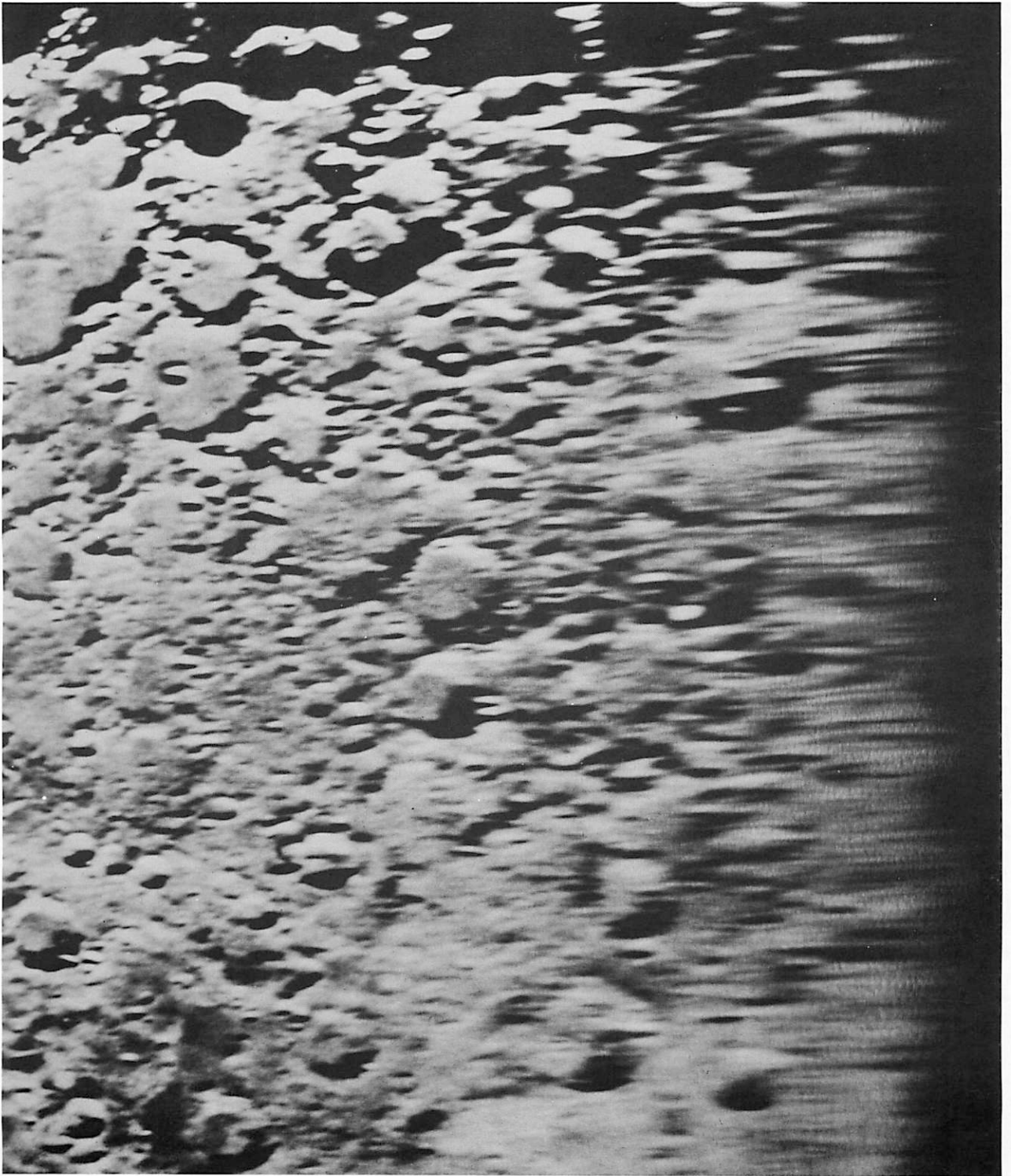


Plate 9.3. Rectified photograph of Areas 2 and 3 (combined).

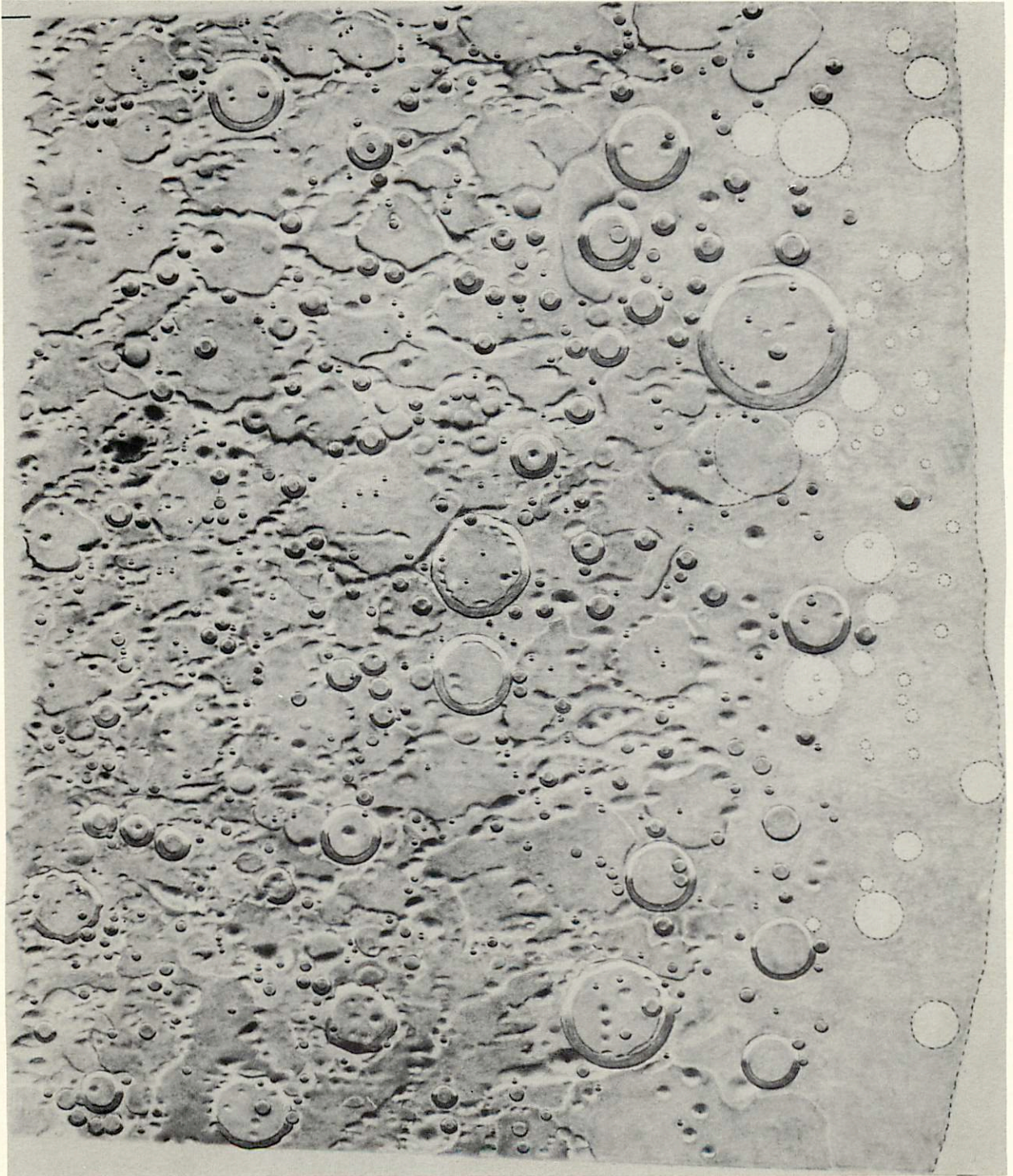


Plate 9.4. Drawing of Areas 2 and 3 (combined).

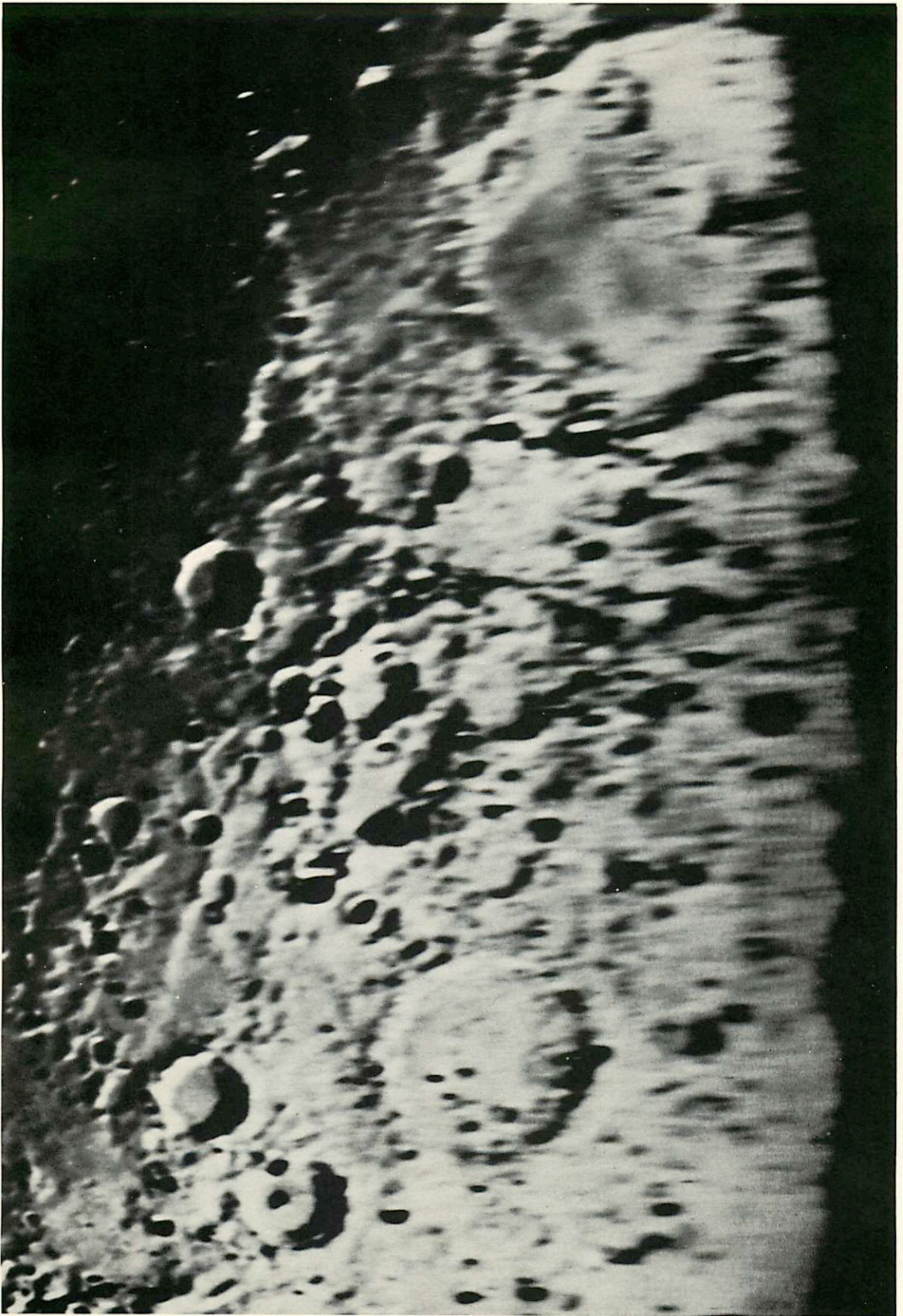


Plate 9.5. Rectified photograph of Area 9.

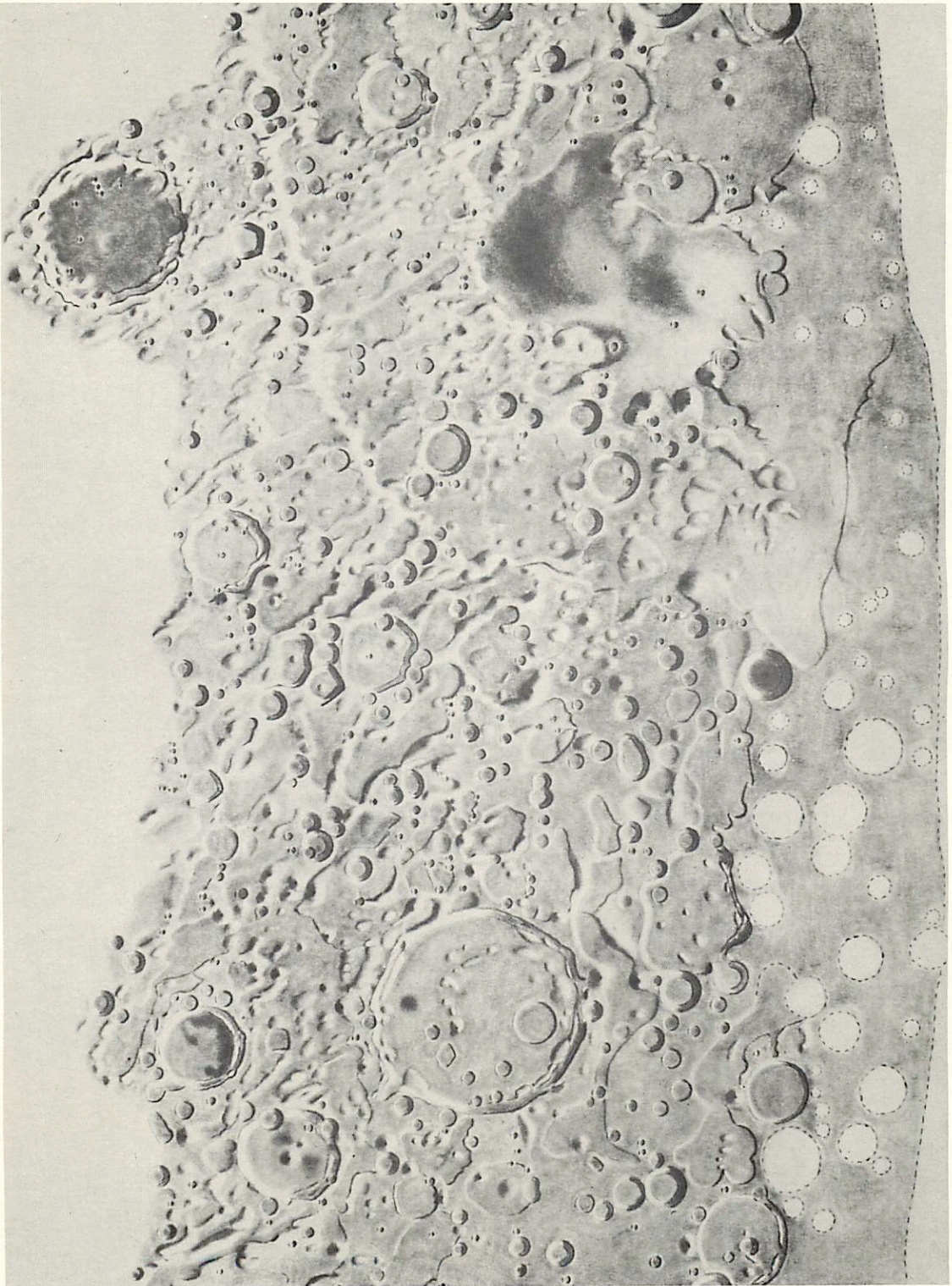


Plate 9.6. Drawing of Area 9.

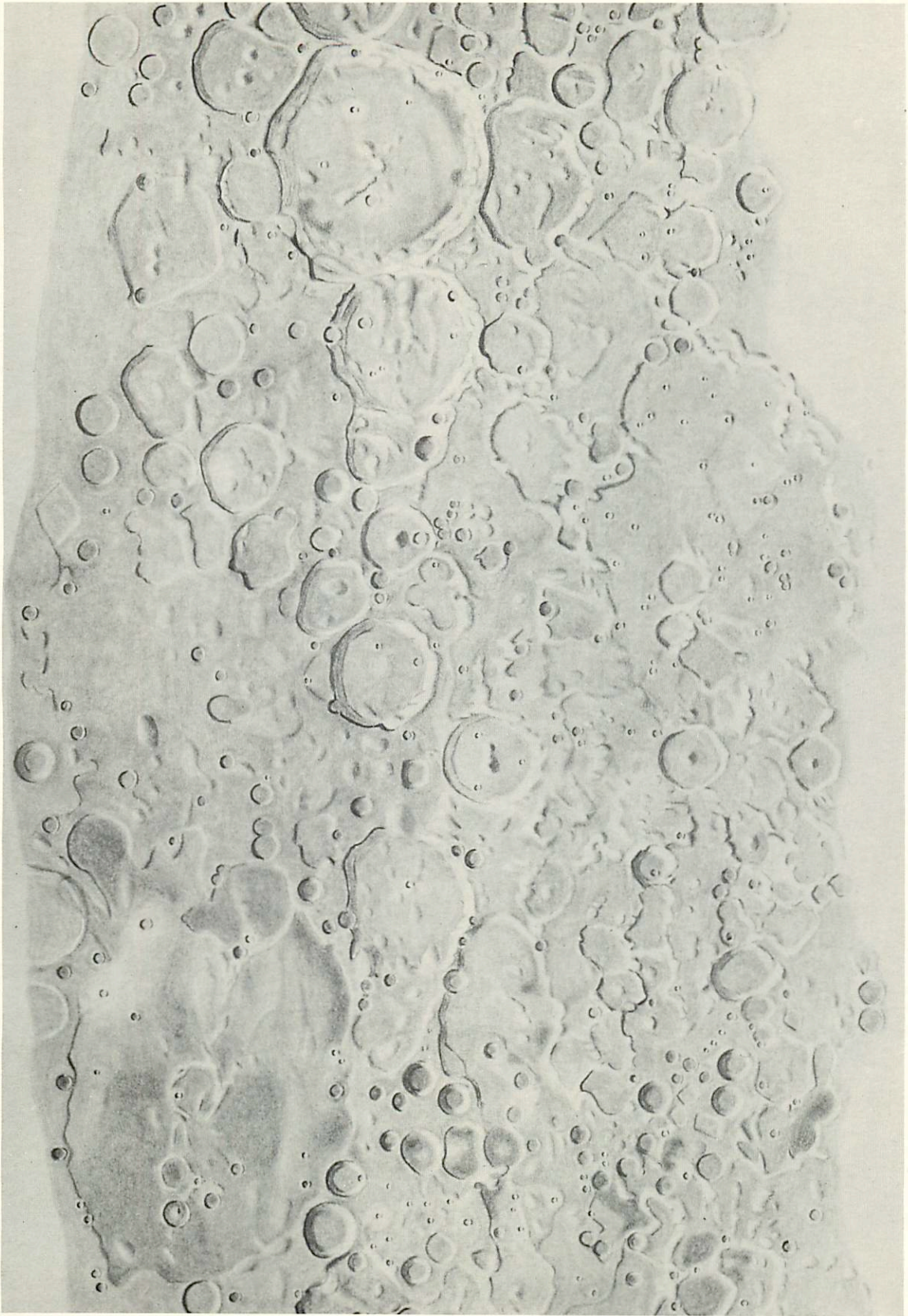


Plate 4.5. Revised drawing of limb Area 21.

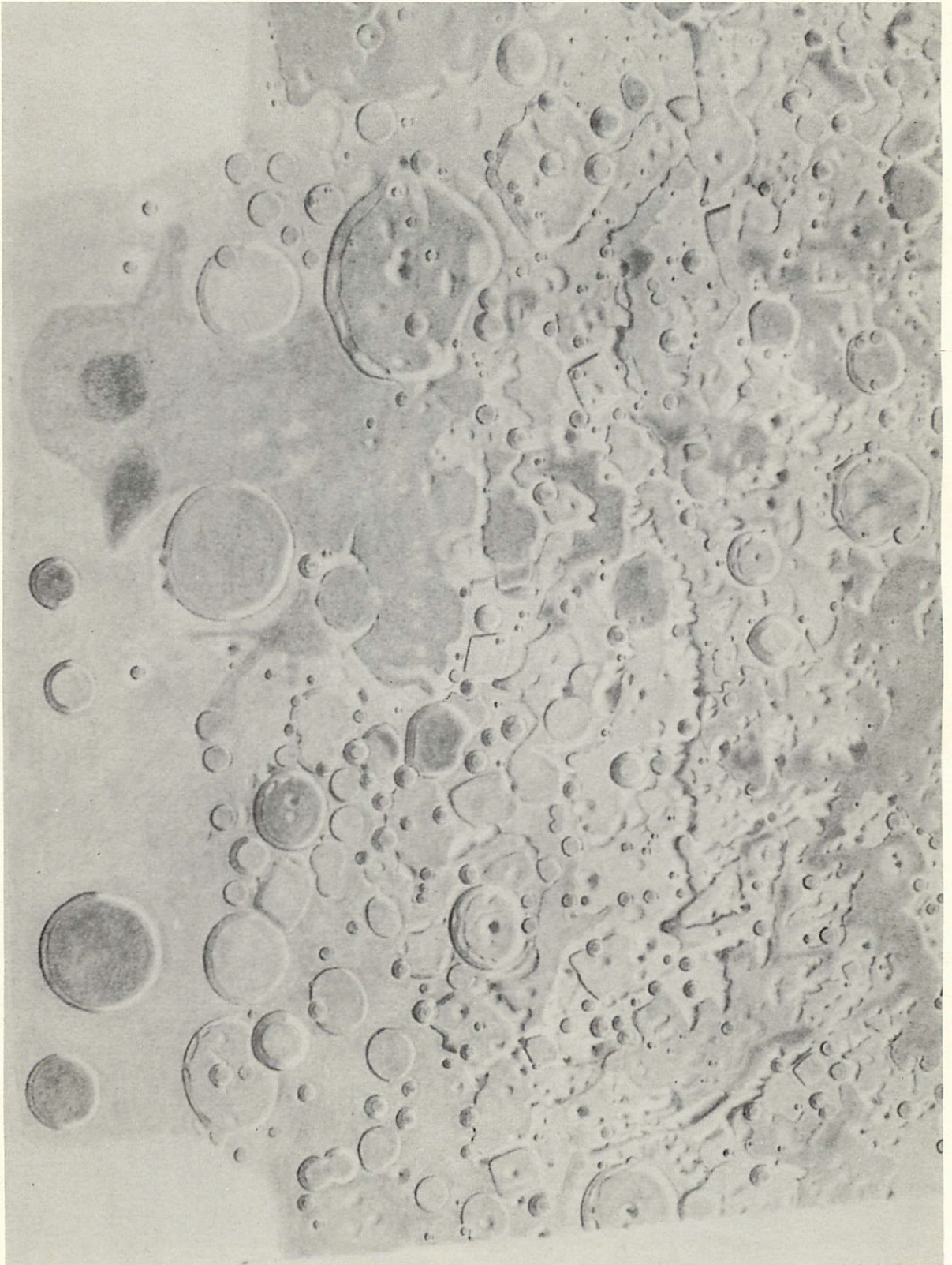


Plate 4.8. Revised drawing of limb Area 15.