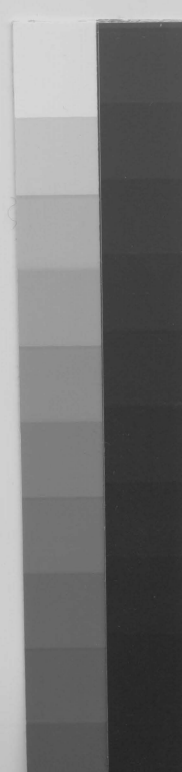
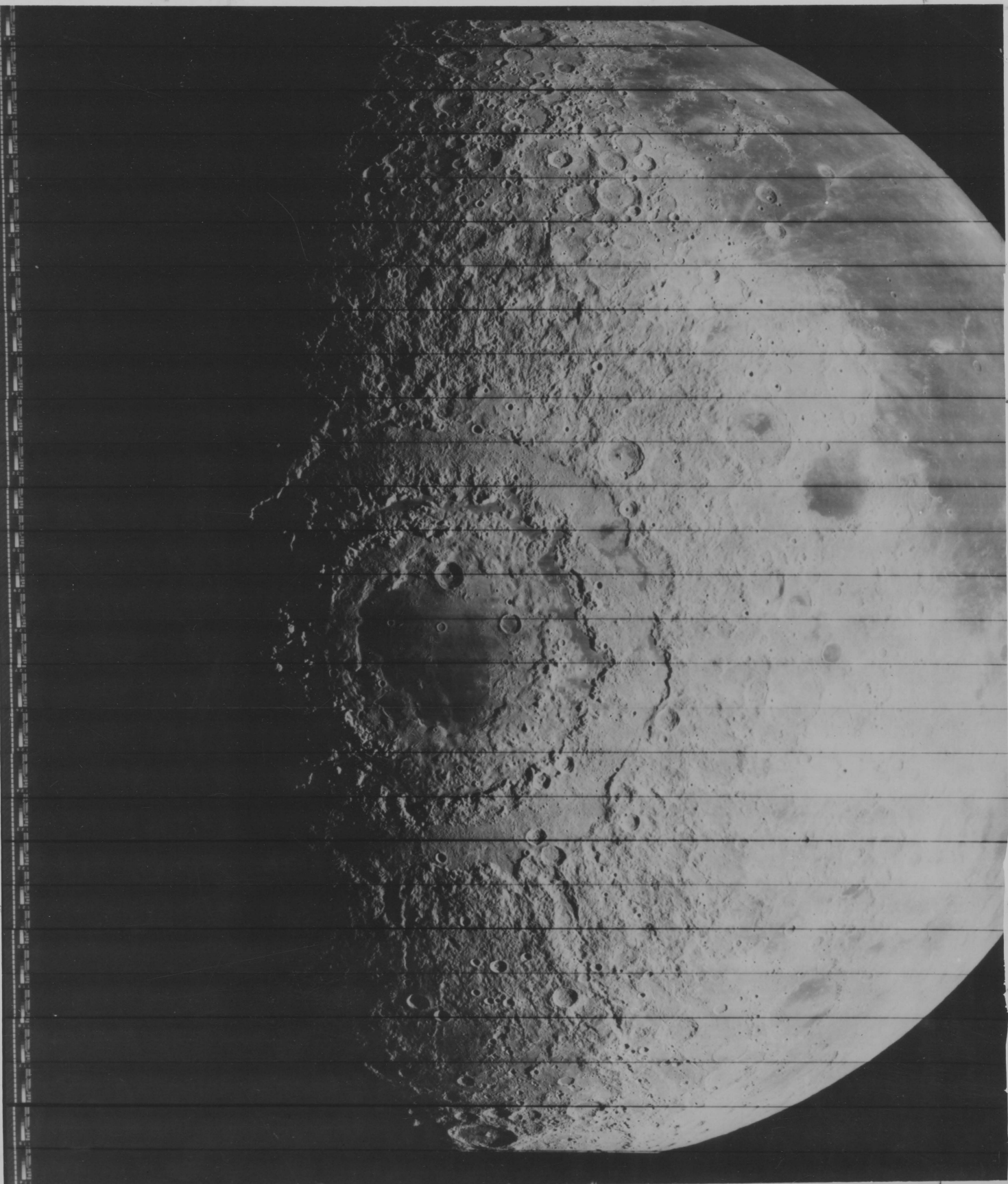


TOP

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TOP 29 x 19 1/2  
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION  
400 MARYLAND AVENUE, S. W. WASHINGTON, D. C. 20546

Fig. 12 Pg 40  
FOR RELEASE: June 2, 1967  
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photos.

L-67-4825 -- WIDE ANGLE FRAME 187 - HAMPTON, Va., -- An enormous and complex lunar feature never before viewed from above was photographed by the wide angle lens as the National Aeronautics and Space Administration's Lunar Orbiter IV spacecraft neared the end of its survey mission of the Moon. It is Orientale Basin, centered at 89° West longitude and 15° South latitude on the extreme western edge of the Moon's visible side. Its circular outer scarp, the Cordillera Mountains, is just over 600 miles in diameter. In this Lunar Orbiter IV photograph, the Orientale Basin is centered at the center. When viewed with the band of edge data at left, the large irregular patch of dark material at the extreme upper right is Oceanus Procellarum, some 750 miles from the edge of Orientale. The Cordillera Mountains which ring the Orientale Basin are among the most massive on the Moon, rising some 20,000 feet above the adjacent land. Within the outer ring, the Rook Mountains form another circular scarp about 400 miles in diameter. Surrounding this complex basin to a radial distance of more than 600 miles is a coarsely graded blanket that clearly covers the older cratered lunar surface. The beautifully preserved texture of the surface and the sharpness of the mountain range suggest that Orientale is probably one of the youngest of the large circular lunar basins. There is a possibility that the blanket, the concentric scarp, the radial structure, and the basin itself may be the products of the impact of a giant meteorite. The small amount of younger dark mare volcanic filling original configuration of the basin to be seen. Elsewhere on the Moon, older basins like the Mare Imbrium and Mare Nectaris would look like this if the volcanic filling were removed. The photograph was made on May 25, when Lunar Orbiter IV was 1690 miles above the lunar surface. Lunar Orbiter IV is one of a series of NASA spacecraft managed by the Langley Research Center, Hampton, Va. Prime spacecraft contractor is the Boeing Company, Seattle, Washington.

from BK.

Planetary Exploration by Carl Sagan

London lectures

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