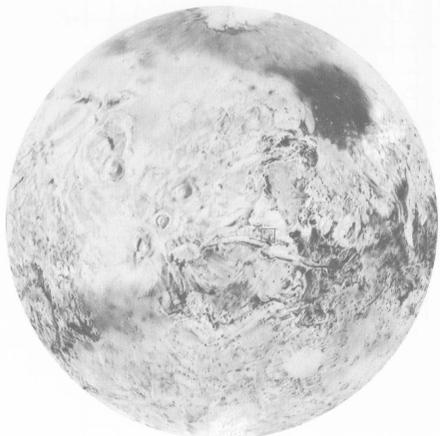


Interior-Geological Survey, Reston, Va., 1984-G84003  
Prepared on behalf of the Planetary Geology Program,  
Planetary Division, Office of Space Science, National Aero-  
nautics and Space Administration under contract W-13,709.



**QUADRANGLE LOCATION**  
Photomosaic location is shown in the western hemisphere of Mars. Indexes of published 1:500,000-scale maps and other series are shown on the reverse side of this sheet.

**NOTES ON BASE**

This photomosaic is part of a series of experimental quadrangles selected to show areas of special interest on Mars. High resolution (less than 100 m per picture element) Viking Orbiter pictures were used to make the mosaic. The images have been digitally enhanced to accentuate high-frequency detail. Image placement is based on the 1978 control net (Davies and others, 1978) and on 1:2,000,000-scale controlled photomosaics digitally transformed to fit the transverse-Mercator projection.

The projection is based on a Mars Transverse Mercator (MTM) system with 20° zones. The scale factor at the central meridian of the zone containing this quadrangle is 0.9946. The projection scale is based on an oblate spheroid (flattening of 1/192) with an equatorial radius of 3393.4 km and a polar radius of 3375.7 km.

**NOMENCLATURE**

All names shown on the reduced base mosaic are approved by the International Astronomical Union (IAU, 1974 and 1983) except for the provisional names listed below.

Provisional names: Candor Chaos and Basilis Mensa  
MTM -05072 Abbreviation for Mars; Transverse Mercator projection; sheet -05072  
M 500K -5/72 CM Abbreviation for Mars; 1:500,000 series; center of sheet lat 5°S, long 72°W; controlled photomosaic (CM).

**REFERENCES**

Davies, M. E., Katayama, F. Y., and Roth, J. A., 1978, Control net of Mars; February 1978. The Rand Corporation, R-3109-NASA, 91 p.  
International Astronomical Union, 1974, Commission 16: Physical study of planets and satellites, use of Lunar and marian nomenclature, in 15th General Assembly, Sydney, 1973. Proceedings: International Astronomical Union Transactions, v. 15B, p. 105-106, 217-221.  
—, 1983, Working Group for Planetary System Nomenclature, in 18th General Assembly, Patras, 1982. Proceedings: International Astronomical Union Transactions, v. 15B, p. 334-336.



**INDEX TO VIKING PICTURES**

The mosaic was made with the Viking pictures outlined above. Copies of various enhancements of these pictures are available from National Space Science Data Center, Code 601, Goddard Space Flight Center, Greenbelt, MD 20771.



**LOCATION OF SELECTED FEATURES**  
Contrast in the reduced base mosaic was purposely suppressed to emphasize the names.

**MTM -05072**  
**CONTROLLED PHOTOMOSAIC OF PART OF THE VALLES MARINERIS REGION OF MARS**  
(EXPERIMENTAL)  
M 500K -5/72 CM  
1984

**NOTE TO USERS**  
Users noting errors or omissions are urged to indicate them on the map and to forward it to U.S. Geological Survey, Building 4, Room 454, 2255 North Gemini Drive, Flagstaff, Arizona 86001. A replacement copy will be returned.

For sale by Branch of Distribution, U.S. Geological Survey, 1200 South East Street, Arlington, VA 22202, and Branch of Distribution, U.S. Geological Survey, Box 25286, Federal Center, Denver, CO 80225