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ABOUT THE COVER . . .

Gigantic volcanic mountain on Mars — called Nix Olympica — was photographed by Mariner 9 in late January, 1972, as the great Martian dust storm subsided. The clearing atmosphere reveals a mountain 600 kilometers (372 miles) across at the base. Steep cliffs drop off from the mountain flanks to a surrounding great plain. The main crater at the summit, a complex multiple volcanic vent, is 65 kilometers (40 miles) in diameter. The mountain is nearly three times as broad as the most massive volcanic pile on Earth. (The mountain that forms the island of Hawaii is 225 kilometers (140 miles) across and rises nine kilometers (5.5 miles) from the floor of the Pacific to the summit crater, Mauna Loa.) Measurements by Mariner 9 instruments show that Nix Olympica's summit crater stands about 23 kilometers (14.2 miles) above the surrounding terrain.

(Photo courtesy NASA/JPL)



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Patents	Ben J. Goldfarb	1001 Playford Lane, Silver Spring, MD 20901
New Horizons	Paul J. Nahin	Dept. EE, Kingsbury Hall, Univ. NH, Durham, NH 03824, (603) 862-1357
Research & Publications	Steven Riter	Dept. EE, Univ. Texas at El Paso, El Paso, TX 79902
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