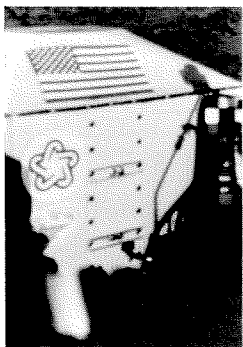




This spectacular picture of the rock-strewn Martian landscape surrounding the Viking 1 lander shows a dune field with a number of features remarkably similar to many seen in the deserts of Earth. Viking scientists have studied areas very much like this in Mexico,

and in California — specifically in Kelso, Death Valley, and Yuma. With maximum contrast the dramatic early morning lighting — 7:30 a.m. local Mars time — reveals subtle details and shading. Taken on August 3 by the lander's camera no. 1, the picture covers 100°,



On Mars — the U.S. flag.

## MARS — UP CLOSE

**A**FTER a journey of 213 million miles that took eleven months, a U.S. spacecraft set down on Mars on July 20. While the Viking 1 orbiter continued to photograph the planet from above, the 1300-lb. Viking lander began taking pictures of its surroundings — besides performing a series of intricate scientific experiments. On September 3 a second scientific station went into operation on Mars when the Viking 2 lander was brought down 4000 miles from the landing site of Viking 1. On these pages — a small sample of the exciting pictures coming back from the Viking vehicles. □



Viking 1 took this high-resolution picture on July 22 — its third day on Mars. The photo shows numerous angular blocks ranging in size from a few centimeters to several meters. The surface between the blocks is composed of fine-grained material. Accumulation of some fine-grained material behind blocks indicates wind deposition of dust and sand downwind of obstacles. The large block on the horizon is about 13 feet wide. The distance across the horizon is about 110 feet.



looking northeast at the left and southeast at the right. The sharp dune crests indicate that the most recent wind storms capable of moving sand over the dunes did so in the general direction from upper left to lower right. Small deposits downwind of rocks also indicate this wind

direction. The large boulder at the left is about 25 feet from the spacecraft and measures about 3 feet by 10 feet. The meteorology boom, which supports Viking's miniature weather station, cuts through the center of the picture.

This high-resolution photo of the Martian surface near the Viking 2 lander shows a few square yards at one of the possible spots for acquiring a soil sample. The rock in the right foreground is about 10 inches across. Most rocks appear to have vesicles, or small holes, in

them. On Earth such rocks can be produced by either volcanic processes or hypervelocity impacts of meteorites, and near this Martian site there is a large impact crater, named Mie, that could be the source of these rocks and this fine-grained material.

