

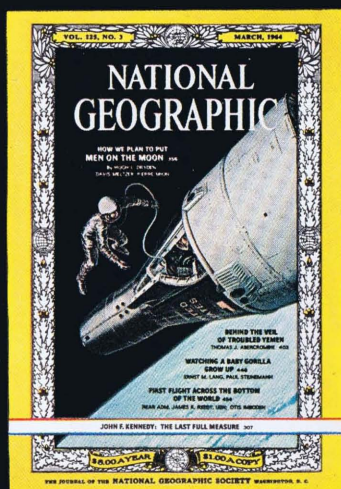
America's 6,000-Mile Walk in Space

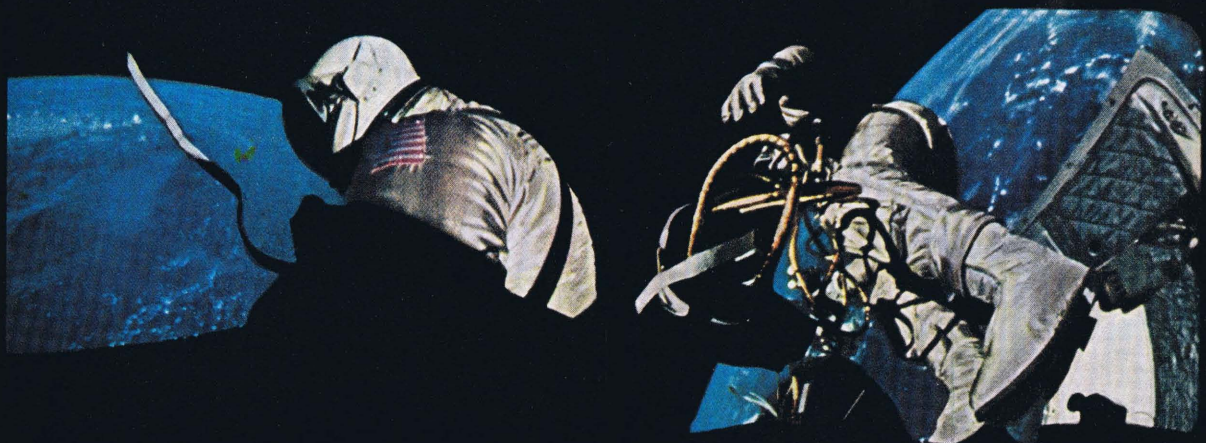
TETHERED by a looping, golden umbilical cord, Maj. Edward H. White II moves freely 100 miles above earth. The historic date, June 3, 1965, marks man's longest walk in the deadly vacuum of space. The American astronaut, using the guidance gun in his right hand, maneuvered at will until its compressed oxygen ran out. He thus became the world's first self-propelled space man. Though orbiting at 17,500 miles an hour, the space walker "had little sensation of speed and no sensation of falling, only a feeling of accomplishment." Millions of earthlings heard White talk with Gemini 4's

command pilot, Maj. James A. McDivitt, during the 21-minute sortie into space.

Prophetically, NATIONAL GEOGRAPHIC pictured this incredible feat 18 months ago, in its March, 1964, issue (inset). In the accompanying article, Dr. Hugh L. Dryden, a Society Trustee since 1951, visualized the day

when a Gemini pilot would leave his ship and stroll among the stars. As Deputy Administrator of the National Aeronautics and Space Administration, Dr. Dryden plays a vital role in NASA's manned flight program, which made possible the dramatic photographs on these pages. GEOGRAPHIC's cover painting proved amazingly accurate, except that the tether turned out to be plated with gold instead of silver, and the emergency oxygen pack rode White's chest rather than his thigh.

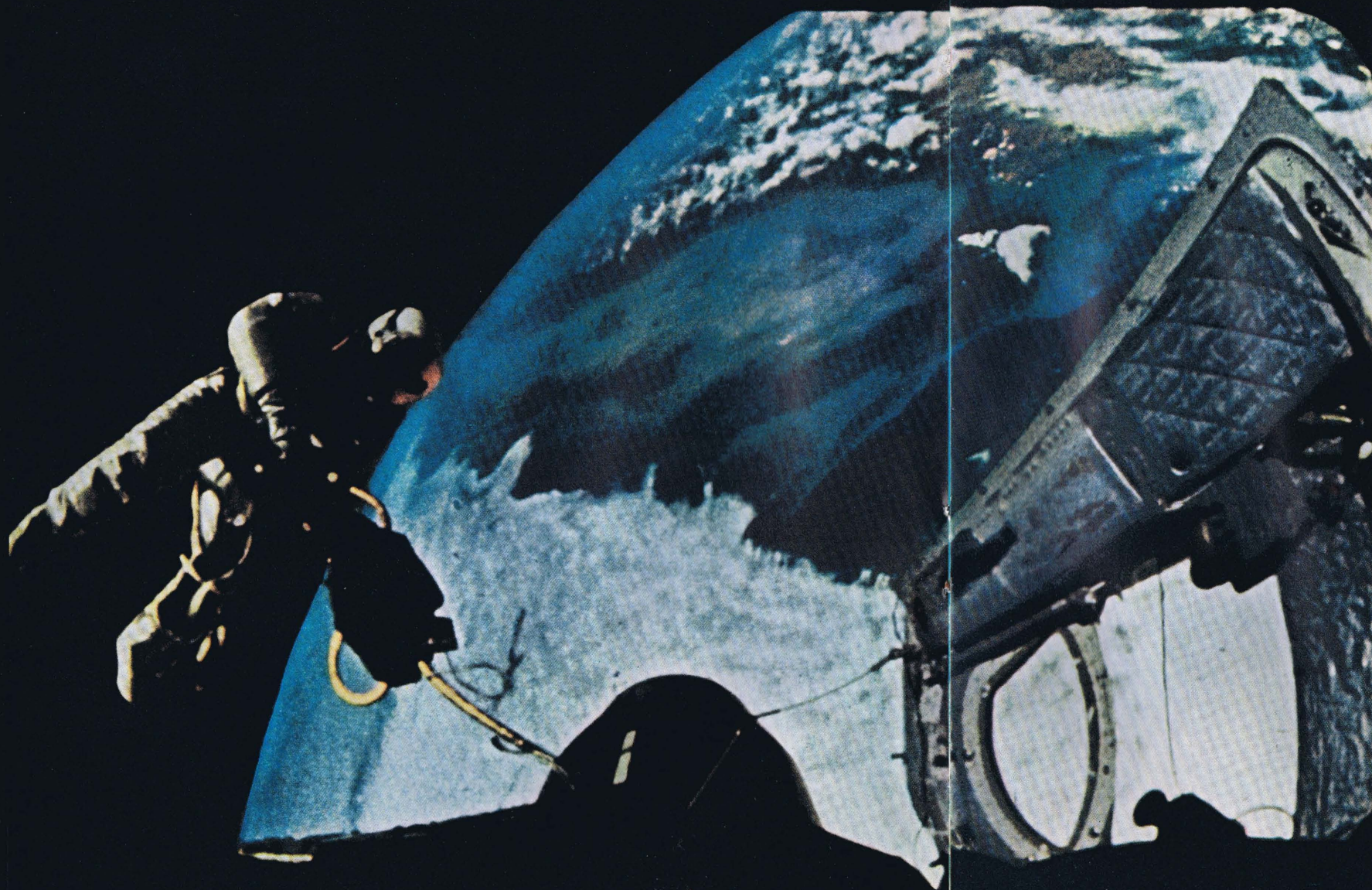




McDIVITT: "He's getting out right now." White makes his first exploratory



move into space, propelling himself in a controlled turn to the left.



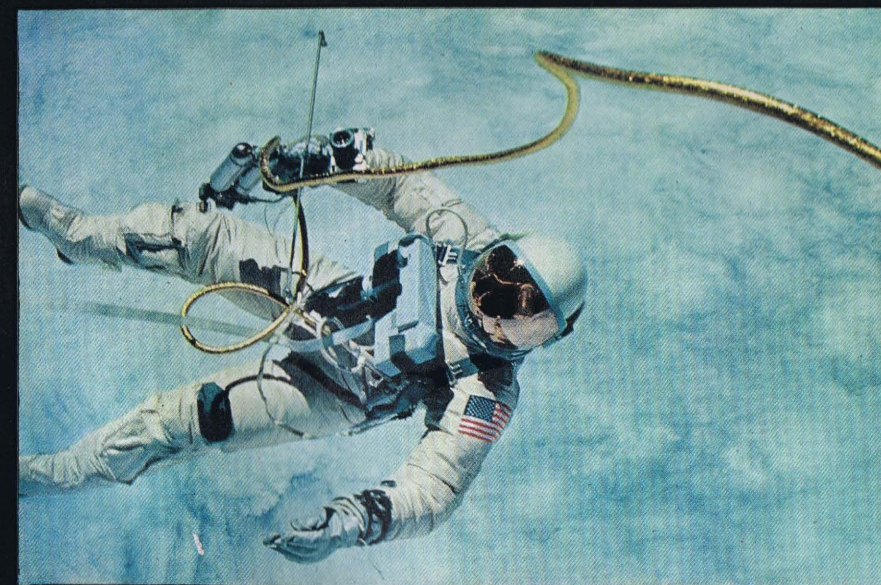
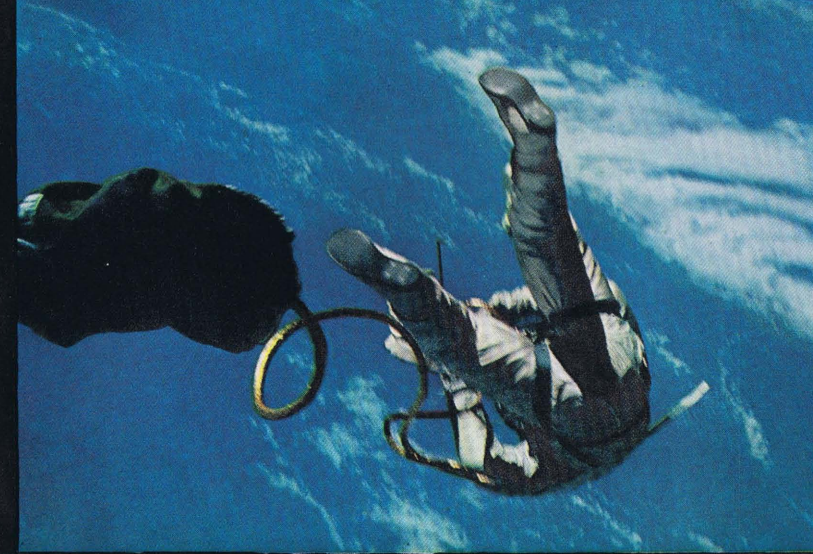
ROSY GLOW OF SUNRISE over the Pacific burnishes White as he stands in the seat (upper left, opposite) and thrusts himself into space with the maneuvering unit. The tie-down strap of his helmet floats free, catching a shaft of light. White moves away from the ship (other pictures) as McDivitt holds the spacecraft steady. Shadow of the mounted movie camera that took these extraordinary photographs appears on the open hatch door at lower right. Three times, as he stood in the seat, White had checked this 16-mm. sequence camera.

"I wanted to make sure I didn't leave the lens cap on," he said later. "I knew I might as well not come back if I did."

Curvature of the earth as seen by the astronauts was not as pronounced as it appears here. "The camera's wide-angle lens exaggerates the curve of the horizon slightly," McDivitt explained after the flight.

At left, the spacecraft approaches the California coast. "I was taking some big steps," said White, "the first on Hawaii, then California, Texas—lightly, in deference to the President—Florida, and the last on the Bahamas and Bermuda. The gun worked superbly; I just wish I had had more oxygen. Changing my position by pulling on the tether was easy, like pulling a trout, say a two- or three-pounder, out of a stream on a light line."

From the moment he stepped outside to his reclosing of the hatch, White's seven-league boots covered some 6,000 miles.



EKTACHROMES BY JAMES A. MCDIVITT, NASA

MCDIVITT: "Let me take a close-up picture of you." White's visor mirrors

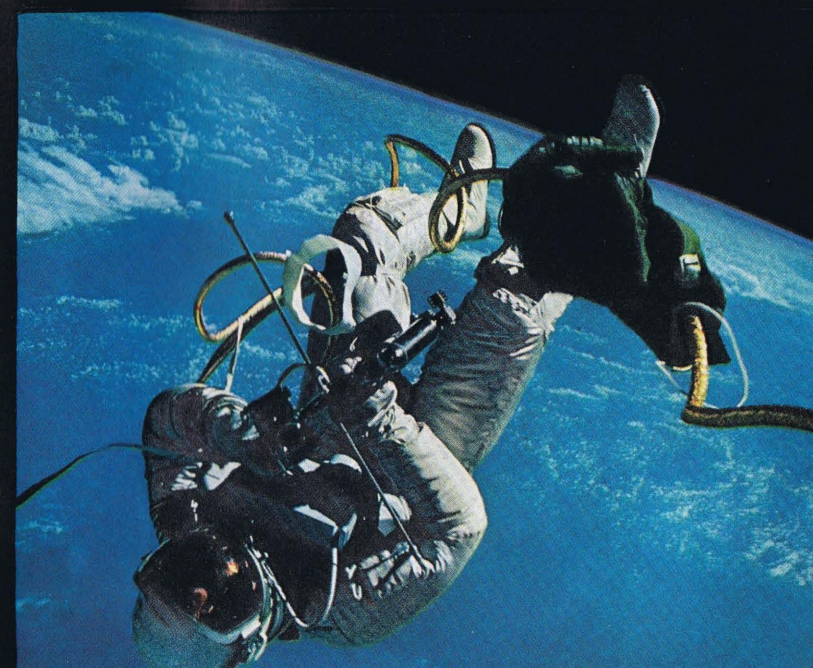
444 **T**HUS THE PILOT converses with his "vaga-bond passenger" via the 27-foot umbilical cord that supplied voice communication as well as life-sustaining oxygen. His gun now exhausted, White does a tumbling act (upper right) by means of the tether extracted from the olive-green stowage bag. In a world that knows no up or down, the outrider feels no discomfort, no disorientation, he later reported. As he floats serenely on his back above earth's cloud cover (center), the Stars and Stripes shines proudly on his shoulder. Pull-

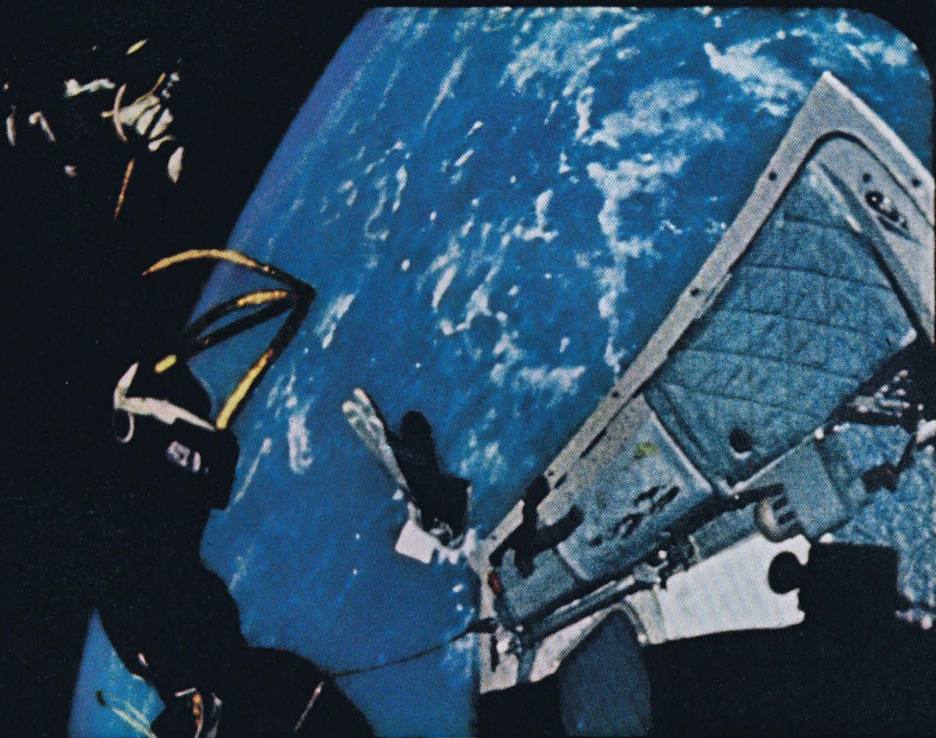
ing on the tether (lower right), he approaches the spacecraft. McDivitt meanwhile focuses on his partner through a hatch window. Here, and on page 441, he captures some of the most breathtaking color photographs ever made. Moments later, White's left shoulder and elbow touched McDivitt's window and evoked a loud complaint: "You smeared up my windshield, you dirty dog." Far below, spellbound listeners the world over chuckled at this fantastic bit of banter in the heavens. Without a pressurized suit, an astronaut's

the Gemini spacecraft.

blood would boil and he would lose consciousness instantly.

White's walk lasted about twice as long as the world's first such venture into space—by Soviet cosmonaut Lt. Col. Alexei Leonov on March 18, 1965. Unlike the American, Leonov had no self-propulsion device.





EKTACHROMES FROM 16-MM. SEQUENCE CAMERA, NASA

ONE OF WHITE'S SPARE GLOVES floats into space to become an accidental satellite. Santa Rosa and Santa Cruz Islands pass below White as he reports: "I can sit out here and see the whole California coast."



EKTACHROME BY ROBERT GOMEL © N.G.S.

WHITE'S THUMB-UP SIGNAL OF SUCCESS and McDivitt's broad smile proclaim two joyous but weary astronauts on the recovery carrier *Wasp* in the Atlantic. "I was the happiest man in the world that day," said McDivitt, "except possibly for Ed." White admitted, "I felt so good I didn't know whether to hop, skip, jump, or walk on my hands." He did a jig step as he walked to the captain's quarters, where the Gemini twins talked by radio-telephone with President Johnson and received his plaudits for the four-day, 66-orbit, 1,700,000-mile flight. Their excellent condition delighted doctors.

Both Air Force officers, the astronauts were promptly nominated by the President for promotion to lieutenant colonel. "If I had seen your space films before," he told them, "I might have promoted you to full colonels."

Major White, born in San Antonio, Texas, graduated from West Point in 1952 and later became a test pilot. Before entering the space program himself, he flew a total of five weightless hours while piloting a transport in which astronauts rode during training for the weightlessness of space. Resuming college studies while an Air Force officer, Major McDivitt, of Jackson, Michigan, graduated from the University of Michigan in 1959, first in his engineering class of 607. In the Korean War he flew 145 combat missions.