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COVER: With a blast of fire and a puff of smoke the Skylab 3 astronauts were off from Cape Canaveral to their successful rendezvous with the orbiting laboratory that will be their home for the longest human stay in space yet attempted. See p. 324. (Photo: NASA)

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COMMENT

'The one moment in the history of mankind . . .'

In Carl Sagan's new book, *The Cosmic Connection* (from which we drew our recent article "The Starfolk"), he speaks in very personal terms about how singular these times are for the exploration of the solar system.

" . . . There are moments when what I do seems to me like an improbable, if unusually pleasant, dream: To be involved in the exploration of Venus, Mars, Jupiter and Saturn; to try to duplicate the steps that led to the origin of life four billion years ago on an Earth very different from the one we know; to land instruments on Mars to search there for life; and perhaps to be engaged in a serious effort to communicate with other intelligent beings, if such there be, out there in the dark of the night sky.

"Had I been born 50 years earlier, I could have pursued none of these activities. They were then all figments of the speculative imagination. Had I been born 50 years later, I also could not have been involved in these efforts, except possibly the last, because 50 years from now the preliminary reconnaissance of the solar system, the search for life on Mars, and the study of the origin of life will have been completed. I think myself extraordinarily fortunate to be alive at the one moment in the history of mankind when such ventures are being undertaken."

In reading Sagan's comments a few days ago, I was struck how especially timely and appropriate they were, even for just this very month and year. Four weeks ago, the United States launched the first spacecraft ever to be sent to the planet Mercury. It will transmit the first close-up photographs of that innermost planet next March after winging past Venus in February. In a week, on Dec. 3, the first spacecraft ever to be sent to Jupiter will photograph and monitor that behemoth planet. Just a week ago SCIENCE NEWS described the first published scientific report about the surface rocks of Venus, based on analysis by the Soviet Union's Venera 8 spacecraft which landed there. This past summer, scientists issued the first detailed radar map of the surface of Venus, revealing large, shallow craters, some as much as 100 miles across. When the resurfacing of the 1,000-foot Arecibo radio telescope is completed next year, radar astronomers should be able to produce radar maps of Venus' cloud-covered surface as detailed as those now obtainable of the moon.

Last year the world was treated to stirring and magnificent photos of the surface of Mars, including views of giant volcanoes and possible ancient riverbeds, taken by Mariner 9, the first spacecraft placed in orbit around that planet. Four Soviet space probes are now on their way to Mars, and at least one of them is expected to land there in February or March. Work is well along on the United States' two Viking spacecraft, each of which will release a probe to land on the surface of Mars in the summer of 1976, where they will actuate sophisticated instruments to detect the presence of any life forms there.

It is an exciting time. There will be, in all of history, only one time in which the planets of our solar system are first revealed to our direct, close-up observation. That time is now. These months, these years.

We share, with Carl Sagan and his fellow planetologists, their enthusiasm and sense of excitement and anticipation for what lies ahead. And we as science reporters feel privileged to be able to share with you in the coming months the close-up views of previously unvisited planets and the sure-to-follow revisions of ideas and theories about the origin and evolution of the solar system.

—Kendrick Frazier

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