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SCIENCE NEWS



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Of course, you read about the 4-star sights to head for, the hotels that help you keep your expenses low, what you should know about local rail, bus, and air services for getting around at lower cost, the facts on such things as taxis, auto rentals, tipping, customs of the land, etc.—all of which make travel easier and less expensive once you know them. But there's still more—always the little hint, the little-known fact that helps you see below the surface in these places you visit, so that you get the color and depth few tourists normally ever find.

Let *All the World at Low Cost* help you see the places you want to visit: the South Seas, perhaps, or the lands "Down Under." Or stay nearer home—visit Mexico, Guatemala, Panama; or Bermuda, the French, English, Dutch, and American West Indies; or go off to Europe. All this help on how to see the world for less costs \$2.

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2. Norman Ford's Selection of the Best Freighters in All the World

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Wherever the world might be calling you, Norman Ford, America's top travel expert, has found for you the most pleasant and relaxing passenger carrying freighters.

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3. Your Guide To Life Aboard Your Freighter

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You learn who does what on the ship, what the ship's flags are saying, what the bells mean, etc. **Freighter Days** details the preparations to make to get the most fun from your trip, and it describes everything from dozens of ways to spend your days aboard the ship to such marine lore as what might be the names of those huge birds who fly above the ship when far out to sea, and enough other facts to make you an "Old Salt."

So don't even think of boarding your ship without **Freighter Days**, the guide that tells you how to travel by freighter. Many, many drawings, yet it costs only \$1.50.

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COVER

Electric signal in a welding torch flame is converted to music, in research at the United Technology Center. The sound-producing flames have serious applications in testing rocket engines and perhaps reducing jetliner noise. P. 43 (Photo: United Technology Center)



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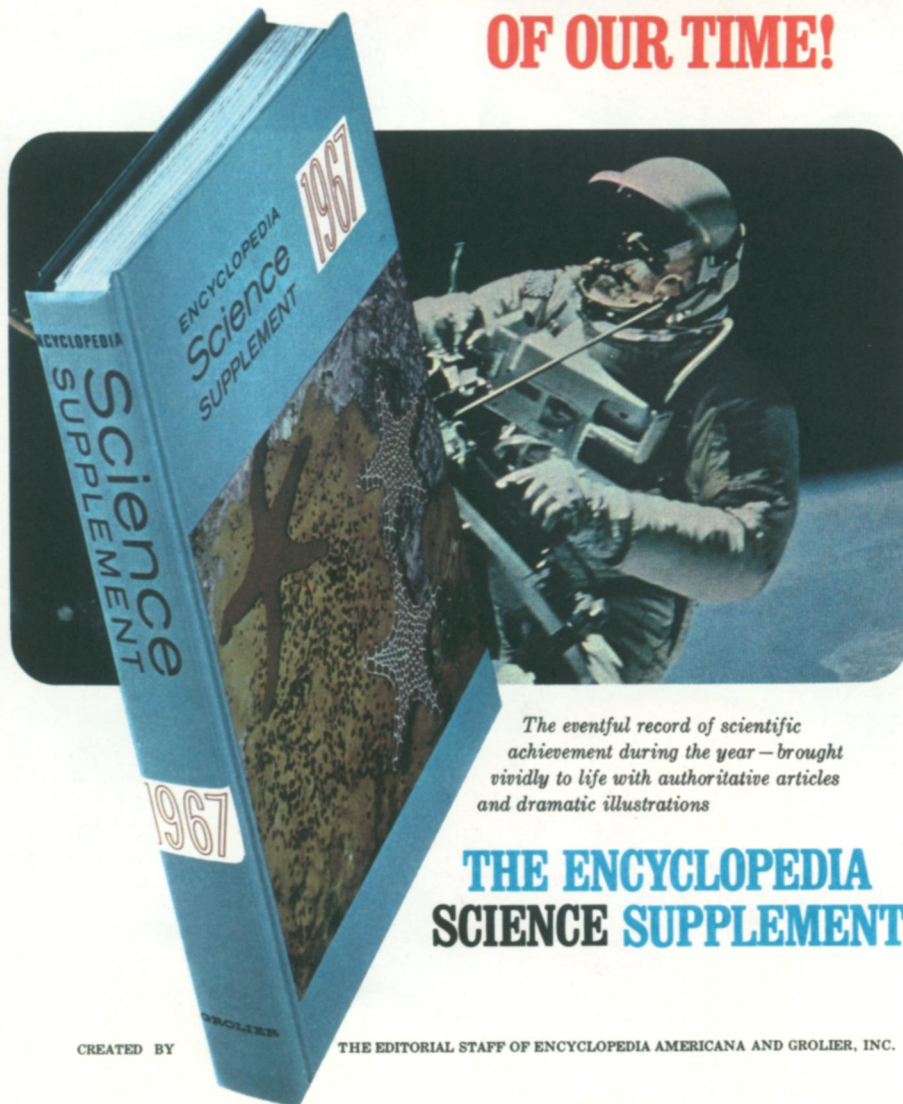
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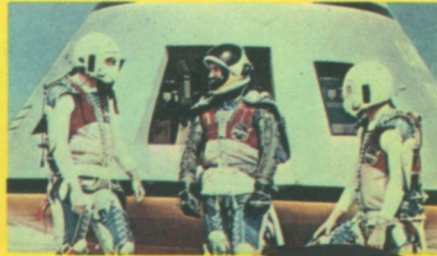


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Astronaut Edie White carries a 60-lb. camera during extra-vehicular activity from Gemini 11. The Gemini space program terminated with the flight status.

Colonel Vladimir Komarov, the first cosmonaut whose flight ended in tragedy. His landing was aborted, and he was killed after striking the earth at 18,000 miles an hour in Soyuz 1.



While many photos during the flight of Surveyor 3, photos were taken of the effort to penetrate the surface of the moon and test its bearing strength for eventual manned Apollo landings. A small mechanical shovel extended from a lunarlike one, was one of the aids used to dig a trench in the soil.

minutes later, blinded by perspiration, he returned to Gemini 11 a hot and tired man. The problems of EVA (extra-vehicular activity) had again been demonstrated by the NASA planners.

The next stage in the mission took place on the following day, when Gordon covered upwards into a new orbit, powered by the Agena engines with which they were still linked. They achieved an orbit with the highest thus far attained by man. Able to survey to an area five times as large as the United States, they took the uppermost of a number of spectacular photographs of the earth. No danger of reentry was encountered at that altitude, apparently because of the Van Allen belt above Australia. After circling the earth in their high-orbiting orbit, the astronauts returned to a lower orbit. Gordon then stood up in the Gemini for 128 minutes in their high-orbiting orbit, the longest period of EVA he experienced to date.

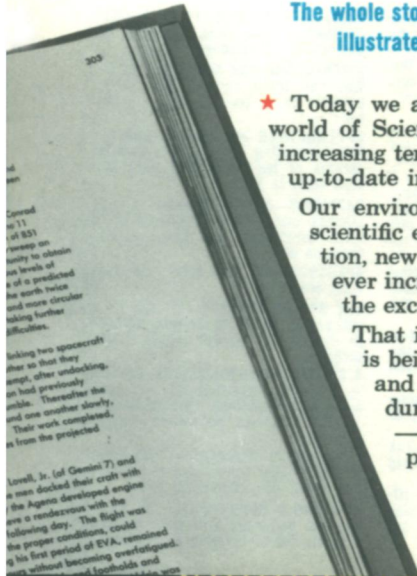
The final task for Gemini 11 was to test the possibilities of a tether, one craft in a slightly lower orbit than the other would be kept in their relative positions. On the first attempt to move out to the end of the 100-foot tether that Gordon attached, the line snagged and caused the Agena to spin. The line grew taut and the two craft began to revolve around each other, creating a very slight artificial gravity in the Gemini. The astronauts splashed down no more than two miles from the landing point on September 15.

Gemini 12, the last in the series, carried James E. A. Aldrin into space on November 11. Unfortunately, Aldrin did not manage to get into orbit, but the astronauts did manage to place the Agena in a solar eclipse that took place the day after the launch. Aldrin, during the mission, performed his greatest work in space. Aldrin, during the mission, performed his greatest work in space. Aldrin, during the mission, performed his greatest work in space. Aldrin, during the mission, performed his greatest work in space.

The USSR, after a lapse of more than a year, launched its first man-made satellite into space, on April 24, 1961. The cosmonaut Vladimir Komarov was the first man to be used again for an orbital mission. The USSR's first three-man space flight thus began.

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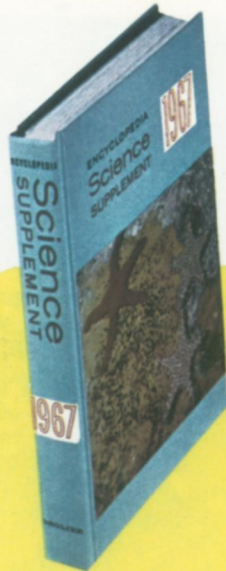
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