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21st Century Space Colony--In this photo, the reader must imagine him or herself as a 21st century resident of a space colony returning home after a holiday on Earth. The 32 kilometer (19 mile) long, 6400 meter (4 mile) diameter cylinder at right and its twin at left are seen as they would appear from an approaching spaceship some 32 kilometers (20 miles) away. The concept of a space colony orbiting between the Earth and Moon is suggested by Dr. Gerard K. O'Neill of Princeton University. He is part of a group of university and NASA experts who will study space colonization at the Ames Research Center during a 10 week period beginning this month. The colony designs depicted in this artist's rendering represents the largest of four types of space habitations outlined by Dr. O'Neill and could accommodate a population of two-hundred-thousand to several million, depending on how the interior is planned. Each cylinder would rotate around its axis once every 114 seconds to create Earth-like gravity. Solar energy would be the source of power and lunar or asteroid raw materials would be used for construction. All manufacturing processes would be carried on in space. The cylindrical portion is the living area and the interior could be fashioned to resemble an Earth landscape. The teacup-shaped containers ringing the cylinder are agricultural stations and the cylinder is capped by a manufacturing and power station. Large moveable rectangular mirrors on the sides of the cylinders, hinged at the lower end, would direct sunlight into the interior, regulate the seasons, and control the day-night cycle. C4954672

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