

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

WASHINGTON, D. C. 20546

FOR RELEASE: June 16, 1975

PHOTO NO. 75-HC-271  
75-II-460

This photograph is a government publication-- not subject to copyright.

It may not be used to state or imply the endorsement by NASA or by any NASA employee of a commercial product, process or service, or used in any other manner that might mislead. Accordingly, it is requested that if this photograph is used in advertising, and other commercial promotion, layout and copy be submitted to NASA prior to release.

21st Century Space Colony--A resident of a 21st century space colony might view this vista of Earth-like landscape from inside his 32 kilometer (19 mile) long, 6400 meter (4 mile) diameter home in space. All the materials used to construct such a space colony would come from the Moon or the Astroid Belt and be manufactured in space using solar power. The interior could be made to resemble the Rocky Mountains, the plains of South Dakota, or the timber forests of Oregon, depending how the builders plan it to be. A space colony of this size could support a population of two-hundred-thousand to several million, depending on the design. The concept of a space colony orbiting between the Earth and Moon is suggested by Dr. Gerard K. O'Neill of Princeton University who, with a group of university and NASA experts, will conduct a ten week study on such colonies at Ames Research Center beginning this month. In this, the largest of four colonies proposed by Dr. O'Neill, Earth-like gravity would be produced by centrifugal force of rotation of the large cylinder around its long axis once every 114 seconds. At the far end of cylinder, a mountain might be built so that a climber, as he approaches the centerline would experience less and less gravity until at the very center, he would be weightless. Sunlight coming through the glass "windows" would be controlled by mirrors outside so that days, nights and seasons would result.

CR91571

USA

-17

