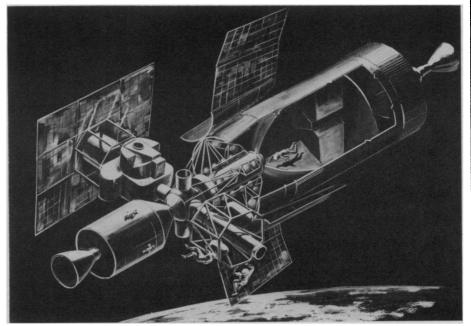
APOLLO APPLICATIONS



NASA

Hotel-Lab in space: living quarters (cutaway), telescope and shuttle craft.

NASA Plans Ahead

A hotel-workshop in space, where astronauts would stay for weeks at a time and then shuttle back to earth, is proposed as a follow-on to the tragedy-slowed Apollo mission.

In fact, the orbiting station, as big as a small house, equipped with a twogas, nitrogen-oxygen life support system and decked with instruments for study of sun and moon, might fly next year, well before Apollo takes astronauts to the lunar surface.

Using hardware developed for Apollo would make the experiments relatively cheap, according to spokesmen for the National Aeronautics and Space Administration.

The orbiting laboratory, for example, would be simply the burned out second stage of a Saturn rocket, providing some 10,000 cubic feet of enclosed space. Spacecraft and service rockets would dock with it, using Geminiproven techniques, and their crews enter by airlock.

Also flown up to the laboratory, under these plans, would be a one-ton solar telescope, to study the sun during 1969, a time of maximum activity in the sunspot cycle. Being above the turbulent atmosphere, the telescope could garner maximum data on the angry sun. Another set of instruments planned would map the moon in great detail.

The first shuttle crew would orbit for 28 days—twice the present record. The next group would take up residence in their small hotel for 56 days. The lengths of stay would double regularly

until men were in orbit for a solid year.

"Have you checked with any of the astronauts to see if they are willing to stay in that thing for a year?" a reporter asked NASA's chief of manned flight Dr. George E. Mueller.

Dr. Mueller did not answer directly, but said "the astronauts have been enthusiastic about the zero-gravity environment and they think it is much better than the one-gravity environment of earth." Also, he said, it is not yet certain that anyone will be asked to spend a year in space.

Much more must be known about the food, exercise, sleep and recreation a man needs in space to stay healthy over a long period, Dr. Mueller said.

The spent rocket tank, 20 feet long and 22 feet in diameter, will be fitted with partitions, sleep stations where the weightless astronauts will be buttoned into canvas compartments, flight kitchens, waste management stations, and exercise facilities.

"Presumably there will be a recreation area," Dr. Mueller said, "although I don't know how much time they'll have for playing chess or what have you."

On the value of men attending a telescope in space, instead of an automatic system such as proposed for the Orbital Astronomical Observatory, Dr. Mueller said, "first of all, you need him to point it. Second, you need him to change the films and so on. Thirdly, you need him to maintain it so when something goes wrong he can fix it."

