

# This year marks the 30th anniversary of Skylab

The first Skylab crew – Charles Conrad, Jr., Paul Weitz and Joseph Kerwin – was launched on May 25, 1973 to an unwelcoming station. The crew made substantial repairs, including deployment of a parasol sunshade, which cooled the inside temperatures to a more comfortable environment of 75 degrees Fahrenheit, and the deployment of the remaining solar array, which brought the power levels up enough to perform closely to the planned mission schedule.

In spite of the problems encountered, the first manned mission accomplished most of its objectives. During its 28-day stay, the crew conducted solar astronomy and Earth resources experiments, medical studies, five student experiments and three spacewalks totaling six hours and 20 minutes.

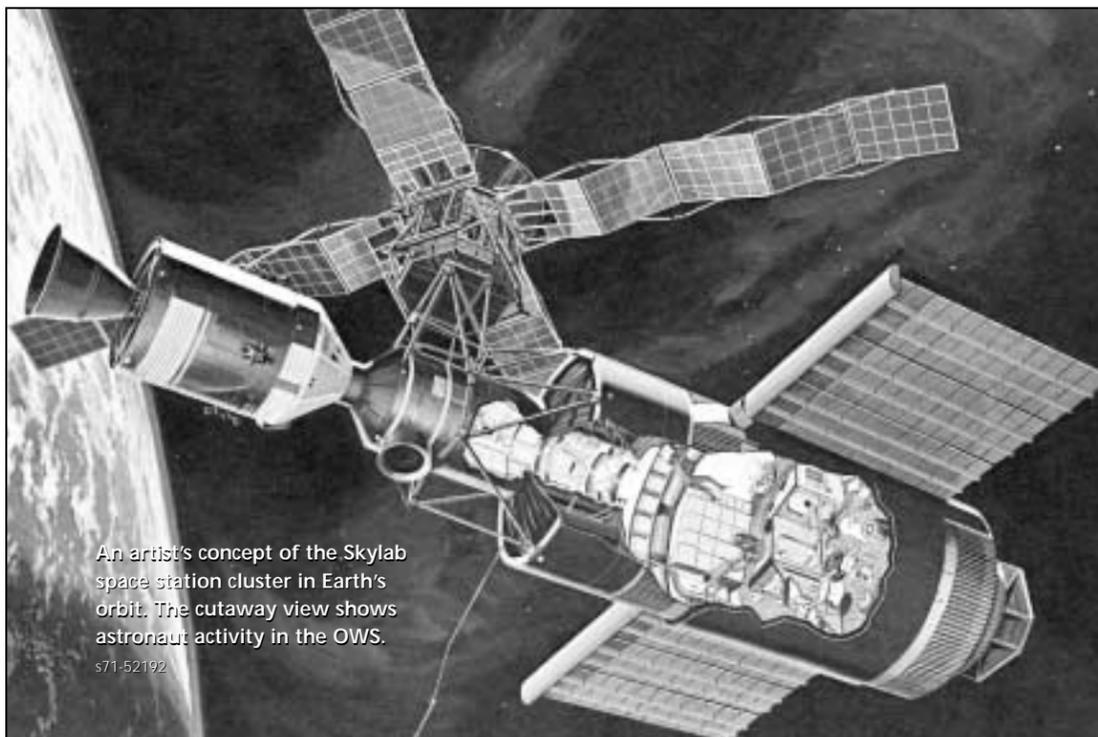
After the departure of the Skylab 2 crew on June 22, Skylab sat empty for six days awaiting her new crew. Alan Bean, Jack Lousma and Owen Garriott arrived at Skylab on July 28, 1973 for a 59-day stay aboard the space station. The new crew continued maintenance of the station, performed extensive scientific and medical experiments totaling 1,081 hours of solar and Earth experiments, and spent nearly 14 hours performing three spacewalks.

Skylab 4, launched November 16, 1973, was the last mission to the station. Gerald Carr, William Pogue and Edward Gibson called Skylab home for 84 days before closing the hatch for the last time. The last of the Skylab missions included an unplanned observation of the Comet Kohoutek among numerous experiments. The crew completed four spacewalks totaling more than 22 hours.

Following the final manned phase of the Skylab mission, ground controllers performed some engineering tests of certain Skylab systems – tests that ground personnel were reluctant to do while astronauts were aboard. Results from these tests helped to determine causes of failures during the mission and to obtain data on long-term degradation of space systems.

Upon completion of the engineering tests, Skylab was positioned into a stable attitude and systems were shut down. It was expected that Skylab would remain in orbit eight to ten years. However, in the fall of 1977, it was determined that Skylab was no longer in a stable attitude as a result of greater than predicted solar activity.

The empty Skylab spacecraft returned to Earth July 11, 1979 scattering debris over the Indian Ocean and the sparsely settled region of Western Australia.



## Components of Skylab

- Orbital Workshop (OWS) – primary crew quarters and work areas, volume equivalent to a five-bedroom house
- Airlock Module (AM) – extravehicular activity port and station's control and monitoring instrumentation
- Apollo Telescope Mount (ATM) – solar observatory
- Multiple Docking Adapter (MDA) – docking ports and controls for the ATM and Earth resource instrumentation



### FROM LEFT TO RIGHT

Astronaut Paul J. Weitz, pilot for the first manned Skylab mission, prepares to check out the bicycle ergometer in the work and experiments area of the crew quarters of the OWS trainer during Skylab training at the Johnson Space Center.

s73-20205

Scientist-Astronaut Joseph P. Kerwin, Skylab 2 science pilot, serves as test subject for the Lower Body Negative Pressure Experiment. Astronaut Paul J. Weitz, Skylab 2 pilot, assists Kerwin with the blood pressure cuff.

sl2-2-180

Scientist-Astronaut Edward G. Gibson, science pilot for the Skylab 4 mission, demonstrates the effects of zero-gravity as he sails through airlock module hatch.

sl4-150-5074

Scientist-Astronaut Edward G. Gibson, Skylab 4 science pilot, stands at the ATM console in the MDA of the Skylab space station cluster in Earth orbit

s74-17306

View of Astronaut Alan L. Bean, Skylab 3 commander, in his sleep compartment, reading a book.

sl3-112-1527

