## science news

OF THE WEEK

## The Skylab 1 crew returns

The "master tinkerers of space", as NASA Administrator James Fletcher called the Skylab 1 crew, returned to earth last week to begin a month-long series of debriefings and medical tests prior to the launch of the second Skylab crew, scheduled now for July 27 or 28. Astronauts Charles Conrad, Paul J. Weitz and physician Joseph Kerwin splashed down in the Pacific at 9:50 a.m. EDT, Friday, June 22 and within 40 minutes were on the deck of the carrier U.S.S. Ticonderoga. They flew to San Clemente, Calif., to see the President and visiting Communist Party leader Leonid I. Brezhnev of the U.S.S.R. before returning to Houston late Sunday night.

The crew set a new record in space of 28 days and Commander Conrad chalked up his own personal record for the most time in space for one man—1,177 hours and 38 minutes. The crew returned more than 30,000 pictures of the sun, 14,000 pictures of earth (including 31 states and nine foreign countries), photographs of the stars and many other scientific goodies.

Before getting out of their Apollo spacecraft, Kerwin took the blood pressures and pulse rates of himself and the other two crewmen. Only Kerwin found it necessary to inflate his pressure suit to help his body accommodate the sudden return to gravity. The pressure suit forces the blood, which upon return to gravity tends to collect in the legs and feet, back up to the heart.

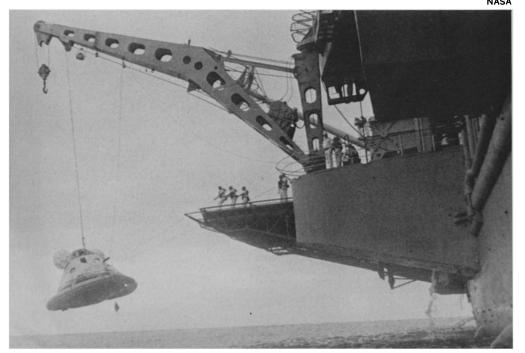
All of the men experienced some degree of uneasiness, but Kerwin suffered the most from nausea and dizziness.

All of the men lost an inch or so in their calves—some muscle tissue as well as fluid. All lost weight: Conrad, three and three-fourths pounds; Kerwin, six and a half pounds, and Weitz, eight and one-fourth pounds.

If the crew experienced some uneasy moments back on earth, they had had none during their adaptation to weightlessness. The crew reported no motion sickness or illness during their stay in the space laboratory. Kerwin showed signs of deconditioning during the lower-body negative-pressure tests in Skylab. (In this test, the blood is forced to the lower body much the same way as occurs upon return to gravity.) "The tests had to be terminated twice because of presyncopal [fainting] symptoms," Hawkins said. None of the men had problems in space completing the tests on the bicycle ergometer, which measures metabolic and exercise capacity.

By midweek none of the crewmen had yet returned to their preflight baselines. But this was expected. All of the Apollo crewmen took at least two to three days to return to normal after the 12-day trips to the moon. This week, doctors began the analyses of the blood, fecal and urine samples returned from space which will reveal chemical changes in the body. Only time and such tests will tell the story of what weightlessness does to the body.

Spacecraft and astronauts are hoisted to the deck of the U.S.S. Ticonderoga.



## Science and Man in the Americas

In a city built upon and surrounded by the legacy of an advanced civilization of the past, scientists from 20 Western Hemisphere nations are engaged in an unprecedented meeting this week and next to exchange research results and to discuss the problems of the present and the potentials of the future.

The site is Mexico City, a sophisticated, modern metropolis built on the ruins of the capital city of the Aztec empire, destroyed so effectively by the Spanish conquerors 450 years ago. Everywhere there are simultaneously disquieting and reassuring signs for both the transience and the continuity of civilization and culture. It is an exaggeration to say that the meeting can help modern society choose between termination or continuation. The one purpose is certainly to help steer the path toward the latter. Another is to promote friendships and contacts among hemisphere scientists.

The event is a special 14-day inter-American conference on Science and Man in the Americas. It is a joint undertaking of the United States' American Association for the Advancement of Science (AAAS) and Mexico's two-year-old National Council of Science and Technology (CONACYT).

"Never before has such a diverse array of important scientific and technological subjects of concern to an entire hemisphere been discussed in full public view over so long a period of time by so many experts from so many different nations," said Glenn T. Seaborg, co-chairman, in opening ceremonies attended by the President of Mexico, Luis Echeverria. His fellow co-chairman, Gerardo Bueno, director general of CONACYT, expressed hope that the exchange of ideas would lead to concrete actions for the benefit of human welfare, and especially in Third World countries.

Not all the hopes of the meeting organizers may be fulfillable, but the conference did seem to be going well. In interviews with SCIENCE NEWS as the first week of the meeting neared an end, AAAS President Leonard Reiser said he was very pleased with it, AAAS Chairman Seaborg called it "a resounding success" and Jorge A. Vargas of CONACYT exclaimed, "It's beautiful, beautiful."

With a majority of the sessions yet to be held, registration had already reached nearly 4,000. Organizers predicted it might rise above the anticipated 6,000 mark. Most participants were from Mexico and the United States, but at least 20 other countries in the Americas and a half dozen else-

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