

eliminated a plan for using ground-based processing of data from the flight to direct the release of ballast.

The other experiments, however, performed just as planned, particularly including a sulfur dioxide pollution sensor sent along by Battelle Pacific Northwest Laboratories in Washington and a group of electrical field detectors provided by Johns Hopkins Applied Physics Laboratory to aid design of remotely piloted aircraft. From the ground, more than 50 radiosondes were released to further probe the atmosphere, as laser beams shone upward to locate temperature inversions.

The da Vinci team will reunite late this month to discuss the mission, while the experimenters begin months of data analysis. Then comes the big decision: whether to do it again. □

Shuffle changes U.S. energy 'team'

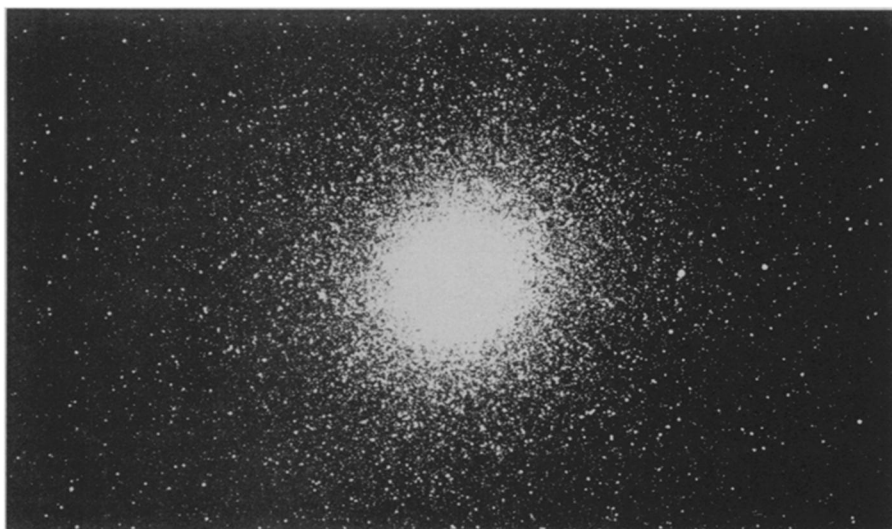
The great energy agency game of "musical chairs" has gone another round, with Federal Energy Administration head John C. Sawhill winding up odd-man-out. He was replaced in the FEA post last week by Andrew E. Gibson, an oil shipping firm executive, but responsibility for coordinating what President Ford calls his energy "team" goes to Secretary of Interior Rogers C. B. Morton—as chairman of a new Energy Resources Council (ERC).

Sawhill had earned the respect of many Congressmen and environmentalists as a strong advocate of energy conservation. But his independence in openly advocating such conservationist measures as a gasoline tax and mandatory restrictions eventually got him into trouble. Morton is a longtime advocate of opening vast new energy supplies—especially coal—and he disliked Sawhill's "style." Gibson is considered more of a "team player."

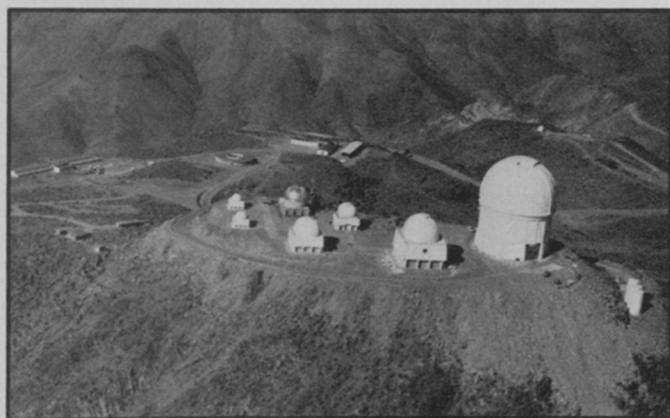
The shuffle also answered the questions arising out of the imminent demise of the Atomic Energy Commission (SN: 10/19/74, p. 248). AEC Chairman Dixy Lee Ray will move to the State Department in a newly created post: assistant secretary of state for oceans and international, environmental and scientific affairs. The new Energy Research and Development Administration (ERDA), which will take over control of AEC laboratories, will be headed by Robert C. Seamans, president of the National Academy of Engineering and formerly secretary of the Air Force and an official with NASA. The AEC's regulatory responsibility will pass to a new Nuclear Regulatory Commission (NRC), and Ford appointed former astronaut William A. Anders to be the first NRC chairman. □

November 9, 1974

Two big telescopes for southern skies



The brightest star cluster in the sky, 47 Tucanae, is the first object photographed by Cerro Tololo's new 158-inch telescope. The observatory sits on a mountain in northern Chile's ultra-dry desert.



The Southern Hemisphere now has two new large telescopes. The four-meter (158-inch) reflector at the Cerro Tololo Inter-American Observatory in Chile recently took its first pictures, and the 150-inch Anglo-Australian Telescope near Siding Spring, Australia, was dedicated by Prince Charles.

The new telescopes will give astronomers a view of the southern sky comparable to the one they have had of the northern sky for the last few decades. Many objects of importance to astronomers can be seen only from a southern location (the two Magellanic Clouds, the nearest galaxies to ours are just one example). The farther south the better, but there are few places to stand there. The Southern Hemisphere is mostly water. Much of the new construction is in just two countries, Australia and Chile.

Cerro Tololo Inter-American Observatory is located on the mountain of the same name, which is 40 miles inland from the coastal city of La Serena and about 250 miles north of Santiago. The site is in the northern Chilean desert region, where rain is a once-in-a-lifetime event and seeing conditions are among the best in the world.

In addition to the big one there are seven smaller telescopes at Cerro Tololo, two of them on long-term loan from other institutions. Cerro Tololo is operated by the Association of Universities for Research in Astronomy, the same organization that operates the Kitt Peak National Observatory in Arizona, and is funded by the U.S. National Science Foundation, but it emphasizes that it is an All-American facility. Victor M. Blanco is director.

The Anglo-Australian Telescope brings joy to the British astronomical community, which for 60 years has seen the best new optical equipment located outside its purview, but according to an article in *NATURE*, the Australians are a bit touchy about the partnership, evidently fearing that the pommies will turn out to be the senior partners in the long run. The AAT will be operated in conjunction with a British Schmidt camera also at Siding Spring. The Schmidt camera will do sky surveys, and when the survey shows something interesting, the big telescope will look at it.

In both cases about a year more is required for testing and adjustment before actual research can begin. □

295