Briefing:

Protests Nix Plan to Orbit a Ring of Light

Paris

Following widespread protest from the international astronomical community, a plan to launch into earth orbit a 25-kilometer circumference ring of reflective spheres, each 6 meters in diameter, has been abandoned. The launch was to have taken place in 1989 to celebrate the centenary of the Eiffel Tower.

The spheres would have been connected by plastic tubes each 240 meters long, and the ring would have appeared to the naked eye slightly larger than the moon. It was the winning entry in an international competition sponsored by the New Company for the Exploitation of the Eiffel Tower, the organization currently responsible for operating Paris's best known landmark, which was built as part of the Great Exhibition of 1889.

Soon after the winning design was announced last fall, it began to come under heavy fire from optical astronomers, who pointed out that if the Light Ring passed in front of a telescope, the observations could be ruined. In addition, according to Paul Murdin, head of Britain's optical telescope on La Palma in the Canary Islands, sensitive electronic light detectors could be "permanently damaged." Other projects entered in the competition promised no better. The second prize was awarded to a curved sail which would reflect the suns rays in the form of a cross, and would appear in the sky with a brightness estimated by its designer to be ten times that of the moon.

The company has now reported that the whole scheme, which attracted 140 entrants, has been abandoned as a result of "international pressures." However, astronomers remain disturbed by the implications of a separate project announced by Celestis Corporation in Florida to launch the cremated remains of individuals in 150-kilogram reflective satellites, a project which Murdin says has the potential to interfere with every photographic image taken by astronomers. The whole topic is likely to be debated at the next meeting of the International Astronomical Union, due to take place in Baltimore next August. ■ **D.D.**

Soviets Test Monsanto's Milk Production Hormone

Monsanto Company of St. Louis is conducting tests in the Soviet Union of bovine somatotropin (BST), a hormone that several American companies hope to market as a way to increase milk production in dairy cows.

The disclosure that Soviet researchers were conducting a field trial of the company's hormone was made by Howard Schneiderman, Monsanto's senior vice president for R&D. He mentioned the test while making a presentation on 8 December to a group of Soviet government officials at the National Academy of Sciences. The results of the field trial, which is under way near Leningrad, will augment data being collected in tests conducted in the United States and Europe.

Officials at Monsanto refused to identify the Soviet institution that is testing the hormone. Larry O'Neill, a company spokesman, says the trial began about 4 months ago and involves approximately 130 cows. Monsanto is supplying Soviet researchers with the hormone at no charge, hoping to learn whether the effectiveness of BST on milk production will vary significantly with Soviet dairy herds.

Monsanto's BST trials are part of a broad dialogue the company has going with the Soviet agriculture establishment. Schneiderman indicated that the company has been talking with Soviet officials about field trials of genetically modified crops. Monsanto researchers also are seeking to gain access to samples of plant varieties that grow in the Soviet Union.

The company's efforts are part of a larger drive to strengthen commercial linkages in the Soviet Union, company officials say. ■ **M.C.**

NASA Denied Access to DOE Laser Fusion Data

The National Aeronautics and Space Administration (NASA) wants to examine research data on a laser-driven fusion technology that could serve as the basis for a new propulsion system* for deep space travel. The Department of Energy (DOE), however, is refusing, so far, to brief NASA officials on recent test results from a classified research program (*Science*, 19 September 1986, p. 1256).

Officials at NASA's Lewis Research Center in Ohio say they had expected to receive a briefing in October. But DOE turned down NASA's request without really saying why. NASA officials reportedly were told that they did not demonstrate sufficient need for the data.

NASA is intrigued with inertial confinement fusion (ICF) because of the propulsion energy that could be obtained from microthermonuclear explosions. In an analysis of one spacecraft that would use ICF, the researchers conclude ICF "is potentially superior to that provided by any other near-term technology. . . ." Studies suggest that it might be possible to hold the round-trip travel time of a Mars mission to 100 days.

NASA researchers say that the agency is stepping up its research on advanced propulsion systems. They want access to DOE's latest data, to help determine whether they should focus more intensely on the ICF concept. DOE is thought to have made major advances is designing tiny spheres containing deuterium-tritium that produce high-energy thermonuclear explosions. NASA officials say they plan to ask DOE to reconsider their request. ■ **M.C.**

NIMH Gets New Director

Lewis L. Judd, chairman of the Department of Psychiatry at the University of California in San Diego, has been appointed director of the National Institute of Mental Health, assuming the post vacated a year ago by Shervert Frazier. He is expected to start work in early January.

The search for a new director was expanded last spring after a group of organizations, headed by the American Psychological Association (APA), protested that the list of candidates contained no females, minorities, or nonpsychiatrists. Although Judd was on the original list, the APA says it is very happy with the outcome.

Judd spent 6 years as chief of psychiatry at the San Diego Veterans Administration and is familiar with NIMH, having served on its Board of Scientific Counsellors and its clinical research study section. ■ **C.H.**

European Southern Observatory

The eight member states of the European Southern Observatory agreed last week to proceed with the construction of the Very Large Telescope in the mountains of Chile. Claimed to be the largest optical telescope in the world when completed, the research instrument is estimated to cost $215 million. It should be operational in 1993. Although the first industrial contracts are due to be signed before the end of the year, a final site is not expected to be selected for 3 years. The leading contenders are Silla (at a height of 2,400 meters) and the summit of the Cerro Paranal (2,700 meters). ■ **D.D.**

**The Vista Spacecraft—Advantages of ICF for Interplanetary Fusion Propulsion Applications*, Lawrence Livermore National Laboratory (UCRL-96676 preprint), 2 October 1987.