

Briefings

edited by CONSTANCE HOLDEN

Shuttle Souvenirs

It's not all space science aboard the U.S. shuttle these days, now that the Defense Department is essentially out of the civilian program. Besides their precious payloads, shuttle astronauts have been carrying charms, tie tacks, high school and wedding rings, even small balls of yarn into Earth orbit.

Astronauts carry such spacey artifacts in Personal Preference Kits (PPKs). (Nothing's too trivial to escape NASA-izing la-

bels at the agency.) PPKs are paperback-sized bags that hold up to 20 knick-knacks—cleared for liftoff of course—that are flight mementoes for astronauts, their families, and friends. NASA stipulates that the items cannot be sold upon return to Earth.

It is this regulation that relieved astronaut James P. Bagian, who flew on last June's life sciences mission, from even toying with the notion of cashing in on his father's British Distinguished Flying Cross, which made the roundtrip in his PPK. Nor will a mountain-climbing pal of Bagian's be able to make a killing with a thumb-sized rock he collected on Mount Everest that has now been to new heights.

PPKs are only a small part of the nonessential paraphernalia that gets launched. Each shuttle crew is also equipped with an OFK (Official Flight Kit)—a bag of mementoes contributed by NASA, its contractors, researchers, businesses, and schools. The 113 items in the OFK of the June life-sciences mission ranged from 300 4 x 6 inch U.S. flags to a deflated volleyball and a magic wand. Perhaps NASA ought to keep that wand.

AIDS Parley Site Set

Next summer's Eighth International Conference on AIDS has been moved to Amsterdam. Originally scheduled to be held at Harvard, the university decided to seek a new location because of the continuing uncertainty about U.S. policies restricting the entry of HIV-infected people. The Netherlands has no HIV-related restrictions on travel or immigration.

California v. Genetic Discrimination

If Governor Pete Wilson signs the bill now on his desk, California will soon have the most far-reaching law in the nation to prevent genetic discrimination. "Almost mind-boggling," is how Larry Gostin, director of the American Society of Law and Medicine, describes the breadth of the bill, which passed the state legislature handily and was sent to the governor last week.

The measure is being closely watched as "a state-level alternative to the federal approach, which does not provide much protection," adds Eric Juengst, head of the ethics program at NIH's National Center for Human Genome Research.

In its most radical provision, the California bill would place an 8-year moratorium on the use of the results of genetic tests to determine eligibility for any health insurance plans. The measure would also make it illegal to use genetic information to disqualify people from group life

and disability insurance plans, but in a compromise struck with the insurance industry, individual policies would be exempted. The bill would further ban the use of genetic information in employment decisions.

Other states have laws protecting against genetic discrimination, but most are very narrowly focused, says Juengst, citing measures to prevent insurers from denying coverage to persons with the sickle cell trait. Similarly, at the federal level, the newly enacted Americans with Disabilities Act does not specify carriers of disease genes among the "disabled" it protects from discrimination. (Genome project officials have been lobbying to add such protection.)

Wilson, a Republican, has 30 days to sign or veto the bill; so far, says a staffer for the measure's sponsor, Democratic assemblyman Lloyd Connelly, no one is placing any bets either way.

Lasker Awards Return

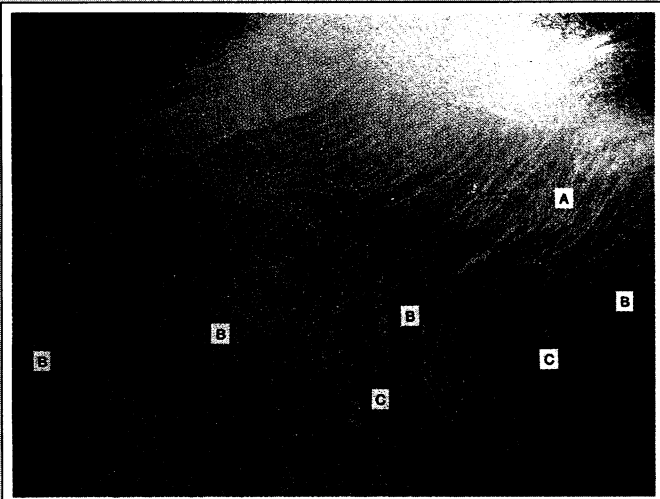
The Lasker awards in science and medicine, short on cash but heavy on prestige, are back after a 1-year hiatus. Two scientists were named the 1991 winners for basic research for their pioneering contributions to understanding fruit fly development. Edward B. Lewis, professor emeritus at Caltech, was honored for the discovery of the Bithorax Complex, a cluster of genes that control how fruit fly body segments develop. Lewis shares the \$15,000 award with Christiane Nüsslein-Volhard of the Institute for Developmental Biology in Tübingen, Germany, who has identified more than 100 genes that specify the fruit fly body plan during development.

The \$15,000 prize for clinical research went to yet another geneticist, Yuet Wai Kan of the University of California at San Francisco, for showing how restriction enzymes could be used to detect gene mutations, work that led to new methods for the prenatal diagnosis of human genetic diseases.

Ocean-Slick Yardstick

Vast slicks of phytoplankton are shadowy performers in such grand productions as the greenhouse effect (also see p. 1490) and ocean-wave dynamics. But until recently, oceanographers lacked the tools to plot the moves of these intriguing performers. No longer, though, thanks to a new laser probe.

"People have noticed the slicks for quite a while, but until now they haven't had the probes to study or quantify them," explains Rensselaer Polytechnic Institute chemist Gerald M. Korenowski. He's changing that, having recently developed a second harmonic generation device that reconstructs a two-dimensional image of the top several micrometers of ocean. With the probe, Korenowski says, researchers will be able to get an accurate measure of not only the volume of phytoplankton, which act as an ocean surfactant, but of how the slicks alter the ocean's surface tension, elasticity, and viscosity, thereby damping ocean waves. The phytoplankton swirls also limit the amount of carbon dioxide the ocean absorbs, perhaps contributing to the greenhouse effect. The chemist is hopeful that his tool will have a substantial impact on what has become one of science's most critical debates.



A swirling mass of phytoplankton covers a 200-km-wide area of the Mediterranean (letters mark barely discernible ship wakes).