ScienceScope

edited by CONSTANCE HOLDEN



Mirroring the southern sky. South African telescope will be modeled after this Texas instrument.

Biggest Telescope South of the Equator

South Africa's Cabinet this month is expected to approve construction of what will be the largest single optical telescope in the Southern Hemisphere. Earlier this month the Cabinet's science committee endorsed plans for the \$20 million, 11-meter South African Large Telescope (SALT), construction of which could be complete by 2003.

To be located at the South African Astronomical Observatory (SAAO) station at Sutherland, 370 kilometers northeast of Cape Town, SALT will peer at distant galaxies to glean insights into the early evolution of the universe. Other studies will cover the energy sources of quasars and active galactic nuclei, stellar populations in the Magellanic Clouds, and the search for planets around stars outside the solar system.

SALT is modeled after the 11-meter Hobby-Eberly Telescope, now undergoing its shakedown phase at the McDonald Observatory in west Texas. Designed for spectroscopic surveys of individual light wavelengths, the Hobby-Eberly has a fixed mirror instead of the standard movable one, an innovation that drastically cuts construction costs. Half of SALT's funding will come from partners in the United States, Poland, and New Zealand, says SAAO director Bob Stobie.

The telescope should also boost flagging morale among South African astronomers. The country's biggest scope today is a 1.9-meter instrument put up in the early 1950s. "The SALT would allow South Africa to re-

main internationally competitive well into the 21st century," says Stobie.

Tale of Two Bills

Call it a case of the messenger getting in the way of the message. On Monday President Clinton touted his Administration's goals to improve math and science education as part of a 2-hour roundtable with politicians and education leaders held at a Washington, D.C.—area high school. Despite the president's passion on the subject, the only questions from reporters involved Clinton's alleged extracurricular sexual activities.

But an incident after Clinton and the White House reporting pack left suggests that the issue strikes a chord with the general public. As mechanical-engineer-turned-television-host Bill Nye filed out of the White House, he was stopped by a reporter attending another press event. "Oooh, it's the science guy," she gushed,

referring to his public moniker. "My kids love your show, and I watch it with them. Can I have your autograph?" Maybe someone's serious about science education, after all.

Risky Business

After months of delicate discussions, a Senate committee has crafted a bipartisan proposal that spells out how government agencies should determine the risks of chemicals and other hazards. The only hitch is that a measure may not reach the president's desk before the end of this Congress.

When a government agency proposes a rule with significant health or environmental effects, it's customary to do a risk assessment. But agencies have varying standards for carrying out such analyses, so they tend to be done unevenly and are vulnerable to political assaults. Last week the Senate Governmental Affairs committee, after reworking a proposal introduced last June, produced a bill (S. 981) that requires agencies to conduct a cost-benefit analysis and peer-reviewed risk assessment on any proposed rule that is expected to cost the economy more than \$100 million or have "substantial impact" on policy or the economy.

Observers who opposed a similar but more pro-industry bill 3 years ago say this one is a model of moderation. Unlike the earlier bill, for example, it wouldn't prevent agencies from setting special safety levels for children and other vulnerable groups. But some environmentalists still oppose S. 981 on the grounds that new rules may get strangled in red tape. And the Office of Management and Budget shares their concern. It wants to tighten up some of the wording and is worried in particular about the openended term "substantial impact."

The question now is whether both houses will move on the bill before this unusually short legislative year ends on 9 October. If not, sponsors may have to start all over next year.

Scientists to Ponder Heroin Handouts

Getting tired of the controversy over giving clean needles to addicts? A fresh round of debate may erupt this spring with a conference at the New York Academy of Medicine that will review a Swiss experiment in which doctors handed out not just needles but also heroin itself to addicts.

"The First International Conference on Heroin Maintenance" is sponsored by several medical institutions, including Beth Israel Deaconess Medical Center, and

funded by George Soros via the Lindesmith Center of the Open Society Institute. It will feature an analysis of a much-touted Swiss experiment in which, to curb the spread of HIV and improve the health of hard-core addicts, the government sponsored a medically supervised program of heroin handouts that involved more than 1000 addicts between 1994 and 1996. The government is now expanding the program to 9000 addicts nationwide.

The Swiss researchers claim that their experiment led to improved health and living conditions for many of the addicts. But others contend that the bottom line is much murkier: The study lacked a



Maintenance the solution? People shooting up in Zurich's notorious Platzspitz Park before 1992 cleanup.

comparison group, relied largely on unverified self-reports, and might have achieved its gains solely through the stepped-up social services it provided, says psychiatrist Sally Satel, an addiction expert and lecturer at Yale University Medical School.

The 6 June meeting is designed to "encourage [U.S.] officials to begin looking at more innovative" treatments, says the academy's Gary Stein. Al-

ready, faced with rising heroin use and the risk of HIV from dirty needles, Australia and the Netherlands are planning similar experiments. Arnold Trebach, founder of the Drug Policy Foundation in Washington, D.C., says such a program in the U.S. "would make an enormous difference" in reducing crime and health problems from intravenous drug use. But others are skeptical not only about the research but the rationale for heroin maintenance. "This is the wrong model for people with a behavioral condition that, under the proper circumstances, incentives, and sanctions, can indeed be modified," says Satel.