SCIENCESCOPE

edited by RICHARD STONE

Schools Offer "Indirect" Cost Savings

University officials, having successfully fought off an Administration plan for a 1-year freeze on overhead rates for federally funded research, are quietly pushing an alternative that they hope will meet the feds' desire to trim costs without halting needed repairs.

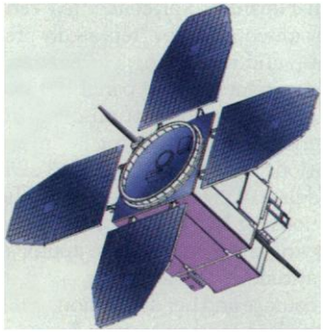
The unofficial plan, the fruit of months of talks between officials from major research universities and the White House, would set limits on what institutions can charge for constructing facilities. Such charges—one component of indirect costs—vary widely by school. Other indirect costs are more firm. For instance, the rate to recover administrative costs is already capped at 26% of the modified cost of a grant.

The primary force to reign in costs would be a comparison of an institution's estimated construction tab with a national standard, as judged by a panel of architectural and scientific experts. The government could refuse to pay for anything beyond the standard. "The idea is to assure Congress that indirect costs are not an open-ended drain on the Treasury," says Cornelius Pings, president of the Association of American Universities.

A White House official familiar with the plan called it a "constructive suggestion" but emphasized that the goal of any reform should be "fairness and transparency, not cost savings." (A Republican proposal rejected last year would lower indirect-cost rates.) University officials are hoping for a quick response. "If we don't get something into the president's 1996 budget [due out in January]," says one lobbyist, referring to the Republican majority in the new Congress, "we'll be in deep yogurt."

First Lady Strikes Nobel Pose

Hillary Clinton this week went to bat for basic research, using a White House reception for the six new U.S. Nobel laureates as an opportunity to take a partisan poke at the new Republican majority in Congress. "We've begun to make some progress on increased funding for science, but I'm very worried that those gains will disappear next year," she told *Science*. "We're going to have to work very hard to hold onto what we've achieved."



CONAE

Argentina's Sputnik. The SAC-B.

One Giant Leap for Argentina ...

In the clean room of a laboratory on the forested slopes of the Andes, Argentina's first satellite is nearing the final stages of assembly. Its gold-sheathed structure stands ready to receive instrument packages. But the hard part of the $12-million project, known as SAC-B, still lies ahead.

Over the next few months, project managers at Argentina's National Commission for Space Activities must lead a complex dance with their international partners to ready the spacecraft for its liftoff from Wallops Island, Virginia, on 30 April.

The satellite, intended mostly to study x-rays from the sun and the distant universe, will carry instruments from Argentina, the United States, and Italy. "It's Argentina's first satellite, and they want to find out [how to do it]," says David Gilman, who manages the National Aeronautics and Space Administration's $1-million stake in the project.

INVAP, a firm owned by the Argentinian state of Rio Negro that's building the satellite, is counting on its international partners to send the instrument packages and other components in time. One major problem is the Italian solar panels, which are running behind schedule. Once these remaining components are installed, SAC-B will be shipped to Brazil for final testing.

... And for NSF, Too

The National Science Foundation (NSF) is about to embark on its maiden space voyage. Next month, a group composed of NSF, two other federal agencies, and two companies expect to launch an innovative instrument to collect data on temperatures and the presence of water vapor in the upper atmosphere.

The instrument, a Global Positioning System (GPS) receiver, will piggyback on a science satellite whose main cargo is a National Aeronautics and Space Administration device for studying lightning. The receiver will gather its data by monitoring radio waves sent from the Defense Department's orbiting GPS satellite network. Observations using this technique—called radio occultation—can be converted to data useful in meteorological modeling, says Mike Exner, manager of the effort, which is directed by the Colorado-based University Consortium for Atmospheric Research (UCAR).

Using radio occultation to get atmospheric data is not new: Space probes to the outer planets have gathered data this way for years. But by tapping the GPS network, which provides exact geographic coordinates for ships, trains, and planes, the UCAR instrument will be able to gather far more data. If all goes well, the next step might be a constellation of small GPS receivers. "Our vision is of many tiny microsatellites distributed in orbit that will provide dense global coverage," says NSF geophysicist Michael Mayhew. Such a stream of precise data on upper atmosphere conditions could be very useful for meteorological modeling and forecasts, Mayhew says.

Glenn to Call for Human Radiation Library

Dozens of news accounts in the past year have pried the lid off 40 years' worth of secret government radiation experiments on human subjects. But it may take several more years for scientists and ethicists to paint a complete picture of the scope of the tests. The reason: A panel, created last January to collect evidence of the tests from federal agencies, lacks the resources to analyze some 250,000 documents it has amassed before the panel's expected dissolution next May.

Human radiation experiments were thrust into the limelight in November 1993 when the *Albuquerque Tribune* ran a series about Manhattan Project scientists injecting plutonium into supposedly terminal patients. Department of Energy Secretary Hazel O'Leary vowed to "open the archives," and the Administration soon created an Advisory Committee on Human Radiation Experiments (ACHRE) to evaluate the ethics of the experiments.

The committee has compiled documents relating to more than 1000 experiments and, short of time, plans to focus on a handful of "representative" ones. To give researchers access to the remaining records, the panel is creating a database arranged by federal agency. "There's a serious concern here that the evidence be archived to make it easily accessible to as many people as possible," says an ACHRE staffer.

John Glenn

Senator John Glenn (D–OH) agrees. In his swan song as chair of the Senate Committee on Governmental Affairs, Glenn was expected earlier this week to call on the Administration to create something more user-friendly than a dusty warehouse—perhaps, says a committee staffer, a records review board similar to the one that oversees files relating to the assassination of John F. Kennedy.