Republicans Talk Tough on Science

Todd Herrman

Last week, for the first time in 40 years, Republicans took control of both the House and the Senate. As part of their efforts to lower the federal deficit while providing $200 billion in tax cuts, they will try to eliminate or pare down agencies that support science and technology — from the U.S. Geological Survey (USGS) to the National Institute of Standards and Technology (NIST) — they warn.

"Every [program] except Social Security is on the table as something that could be cut," a House Budget Committee spokesman asserts.

Republican leaders probably will not announce until the end of February which programs they'll target for cutbacks. But GOP members of the House and Senate science committees have begun revealing in hearings and press conferences that they'll want some protections for the space program and basic research.

Many in the Republican leadership have held congressional seats for years and built records of support for science. Many members of the committees overseeing the National Institutes of Health, for instance, have avidly backed biomedical research. However, even these members now say budget cuts appear inevitable.

Rep. Robert S. Walker (R-Pa.), the new head of the House Committee on Science (formerly the House Committee on Science, Space, and Technology), has helped to boost science budgets during his 18 years on the panel.

In one of his first moves as chairman, Walker plans to work next week on a bill that would promote research on hydrogen as a fuel source for cars, aircraft, and power plants, an aide says. He'll also push for passage of legislation to improve the federal government's use of scientific risk assessments.

At a science committee hearing last week, Walker told the heads of key science agencies that it's time for government researchers to work more closely with industry.

He also recommended using science, not just regulations, to protect the public's health. For example, developing nonpolluting energy sources avoids the need for regulating energy-related pollutants. Promising taxfree profits serves as the best incentive to get industry to make any change, he added.

During the hearing, members made clear the high value they place on federal space agency programs. Walker and others also called for more support of basic science. "The most important issue we have to address is basic research," argued Rep. Vernon J. Ehlers (R-Mich.).

Walker and other Republicans assert, however, that they will probably reduce or eliminate agencies they targeted for cuts in past years.

In GOP-proposed budget packages in 1993 and 1994, Republicans called for lowering or freezing funding for the National Oceanic and Atmospheric Administration, the Agricultural Research Service, the National Science Foundation, and energy programs. They also recommended reducing federal payments to universities to cover research-related overhead, such as building costs and janitorial services.

Republican staff of the House Budget Committee in late September produced a report that suggested abolishing the USGS, the National Biological Service (née Survey) and NIST's Advanced Technology Program (ATP), which helps industry develop commercially risky technology. ATP also came under attack at the recent science committee hearing and in the Contract with America, the GOP legislative blueprint for the future.

Recently, two Republican senators asked President Clinton to transfer to other military programs $1.1 billion the Department of Defense now provides for academic research.

Although Clinton administration officials share the Republicans' interest in lowering the federal budget deficit, the GOP proposals concern them, White House Science Advisor John H. Gibbons said at the committee hearing. "Science and technology is the seed corn, and we have to resist the temptation to eat that," he argued. — *T. Adler*

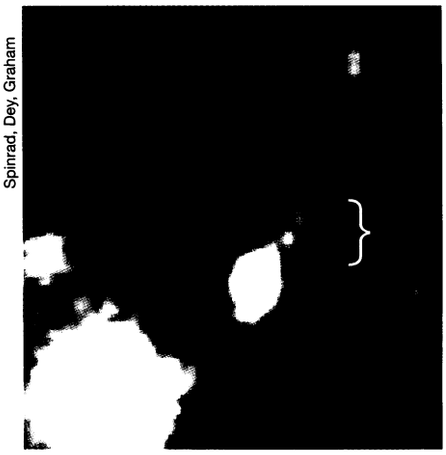
Keck goes the distance for faraway galaxy

The world's largest optical telescope has captured an image of the most distant galaxy known.

The new picture indicates that even though astronomers are observing the galaxy as it appeared soon after the birth of the universe, it had already formed stars and developed significant structure, possibly a black hole. The findings add to earlier suggestions that at least some newborn galaxies matured quickly, undergoing substantial evolution within a few hundred million years of the Big Bang.

English astronomers had originally discovered the galaxy, now dubbed 8C 1435+63, by detecting its unusual pattern of strong radio emissions. Using a telescope in the Canary Islands, Spain, they and their collaborators took a fuzzy image of the faraway body in visible light (SN: 5/14/94, p.311) but failed to obtain a detailed picture.

Now, another group of scientists has used a telescope with more than four times the light-collecting area — the 10-meter W.M. Keck Telescope atop Hawaii's Mauna Kea — to get a sharper image of the distant galaxy. Hyron Spinrad, Arjun Dey, and James R. Graham of the University of California, Berkeley, have also made observations with smaller tele-



Spinrad, Dey, Graham

Composite false-color image depicts the most distant known galaxy (bracket), surrounded by several brighter galaxies that lie closer to the Milky Way. The northern and southern halves of the galaxy, called 8C 1435+63, differ in the way they radiate energy. Broadband emissions in the ultraviolet (indicated in green) and from the glow of hydrogen atoms (blue) are associated primarily with the southern half, while radiation in visible light (red) dominates the northern half.