

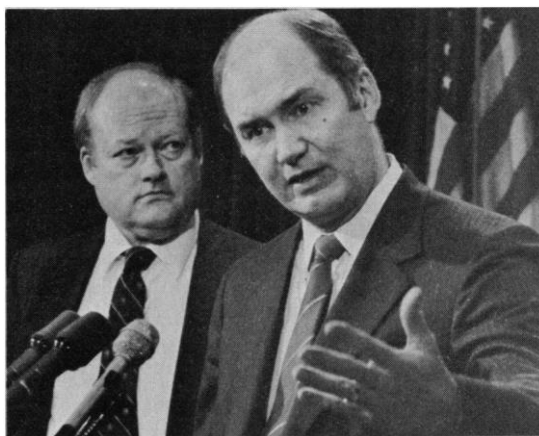
Research Pinched in First Year of the Gramm-Rudman Law Era

Reductions of 4.3 percent cause no major upheaval in most federal agencies; but in 1987 research programs may face cutbacks and layoffs under the budget balancing law

SIX months from now, the Gramm-Rudman-Hollings deficit-reduction law may mean nothing if the courts invalidate its automatic procedure for stepping down annual budget deficits to zero. But for 1986, the mechanism is very much alive—imposing a reduction of 4.3 percent on most 1986 civilian programs. And with the cutback taking effect 5 months into the fiscal year (on 1 March) many federally operated and supported research programs are being squeezed.

In fact, most government agencies are still deciding how to make the reductions. The National Aeronautics and Space Administration, for example, knows it must lop \$322 million from its \$7.5-billion budget. But with so much to be dropped, NASA officials are proceeding cautiously in applying cuts and are seeking to control damage to programs. With the cuts coming so late in the year, says Gary Allison, director of resource analysis, the reductions in budget authority in some instances could have impacts greater than the actual 4.3 percent reduction. But it will be weeks before NASA really knows how all the program cuts will fall into place, he says.

The Office of Energy Research at the Department of Energy is having to cope with a \$70-million reduction in its \$1.767-billion budget, which covers basic energy research, physics, and magnetic fusion. In high energy and nuclear physics; for example, contractor-operated national laboratories may have to make employees take some leave without pay, says William Wallenmeyer, director of high energy physics. Already down from a budget of \$542 million in 1985, high energy physics is being shaved another \$22 million under Gramm-Rudman, leaving the program with \$495 million in FY 1986. The cutback is being applied equally across all high energy and nuclear physics programs. Because operating budgets are down, says Wallenmeyer, there are few areas in which to make reductions, except in personnel costs. Despite this year's cutbacks, it does not appear that the



Budget crunchers

James C. Miller III, director of the Office of Management and Budget, and Rudolph G. Penner (right), director of the Congressional Budget Office, calculated the FY 1986 budget reductions.

White House will let high energy physics languish. The Administration is expected to support a budget for FY 1987, sources say, that exceeds \$517 million.

The National Science Foundation has been similarly inconvenienced by the 4.3 percent reduction, which pares its budget by \$65.5 million to \$1.46 billion. About one-third of the agency's funding already has been spent, but NSF officials expect that the formula reduction can be met in most instances without much pain. "We are not talking about any major policy shifts," says NSF Controller Sandra Toye. The funding loss, however, could reduce the total number of grants the agency awards this year, particularly to borderline proposals that are not acted on until the end of the year, the NSF official notes.

Some programs such as astronomy center operations may have a harder time of it, Toye admits. The agency, however, has limited authority to reprogram funds within appropriations categories—10 percent of a program budget or \$250,000, whichever is less—without seeking congressional approval. And Toye says it is possible that the agency may seek congressional permission to reprogram larger sums to cope with the upheaval of Gramm-Rudman. As with other agencies, it may be several weeks before the details of NSF's budget revisions for 1986 are resolved.

At the Department of Agriculture, research activities of the Agricultural Research Service will be chopped by an estimated \$21.6 million as the agency's budget is cut to \$482 million. John Victor, ARS's director of budget and program management, says the impact will be slight because the agency was operating at its 1985 budget level at the start of the new fiscal year since it lacked a congressionally approved budget. The Cooperative State Research Service's grants to universities and colleges will fall from \$239.5 million to about \$229.1 million. Similarly, competitive grants awarded by the Office of Grants and Program Systems will drop about \$2.1 million to \$49.9 million. Budget officials say that they are not certain how the Gramm-Rudman cut will be applied, but note that the size of grants could be trimmed or fewer grants may be issued.

The only major research program to escape unscathed is the Reagan Administration's Strategic Defense Initiative, commonly known as "Star Wars." The Administration used a one-time exemption provided in the budget-balancing law to shield this \$2.8-billion project from the uniform 4.9 percent reduction imposed on most Department of Defense activities. Without this shield, SDI would have lost \$135.2 million. As a result, other research programs within DOD's research budget function had to take deeper

cuts—about 8.2 percent—to compensate for SDI's exemption.

The department's new university research initiative also was hit hard by Gramm-Rudman. The first \$25 million, the figure originally proposed by the Administration, has been cut deeply to insulate SDI. The reduction was shared equally by the Defense Advanced Research Projects Agency, Army, Air Force, and Navy, which jointly underwrite this research. The remaining \$75 million added by Congress for university instrumentation, equipment, fellowships, and interdisciplinary research (bringing the program to \$100 million) has been reduced 4.9 percent. And this year's cut may be a sign of worse things to come. The department itself, sources say, is recommending wiping out the \$75-million congressional add-on in its forthcoming budget proposal for 1987.

Next October, SDI and the military equipment and personnel accounts—also exempted this year—could be subject to Gramm-Rudman's automatic reductions. Should Congress and the Administration fail to agree by 5 October to reduce the annual budget deficit to \$144 billion, the automatic mechanism will take over. All parts of the FY 1987 budget (except protected programs) would be cut equally to bring the deficit to the target specified in the legislation passed in December 1985.

Reaching the \$144-billion mark for 1987 will be difficult. Deficit projections for 1986 calculated by the Congressional Budget Office have grown from \$180 billion to \$220 billion over the past 5 months, chiefly because of revenue shortfalls and higher costs for farm price-support programs. The \$11.7-billion cut that Congress mandated under Gramm-Rudman in FY 1986 will only lower the deficit to \$208 billion. Consequently, \$64 billion must be shaved from federal expenditures for the next fiscal year, which begins 1 October.

Deep cuts in discretionary spending will be necessary to achieve this, unless the Administration gives in to mounting cries for new taxes. Although the White House is expected to continue to support increases for basic science research in FY 1987, applied research and technology demonstration programs will suffer in many instances—two areas being fossil and nuclear energy.

In the meantime, Gramm-Rudman is under assault in the courts. The law's constitutionality is being contested by the National Treasury Employees Union, Representative Mike Synar (D-OK), and the Public Citizens Litigation Group, a nonprofit group set up by Ralph Nader 14 years ago. At issue is whether the rights and budgetary responsibilities of the Congress have been abrogat-

ed by the automatic sequestering provision.

The Reagan Administration is challenging the role of the General Accounting Office in the automatic budget-cutting mechanism. The Justice Department sees GAO's reporting role as an infringement on the President's budgetary responsibilities. Determining whether the Gramm-Rudman budget reduction targets will be met in any given year, says Justice, should be left to the executive branch—not the GAO, a branch of Congress.

If the court accepts these arguments, there is a fallback provision in law. It calls for the House and Senate to approve joint resolutions on reductions to meet the budget deficit targets, which drop by increments of \$36 billion annually through FY 1991. But without the automatic provision, the door remains open for disputes between the two houses of Congress, and/or for the President to settle for something less than the stated targets. Minus the sequester provision, legislators say that the new law is toothless.

With the national debt now at \$1.94 trillion and rising fast, the pressure to reduce the deficit will not recede—even if the law is overturned. The National Taxpayers Union already is asking the United States District Court for the District of Columbia to set a firm schedule for halting annual spending deficits. In what it claims is the largest class-action lawsuit ever filed, the taxpayer lobby argues that the rights of the nation's 60 million children and of future generations are being abused by greedy adults who are living beyond their means. It asks the court to enjoin the federal government from issuing new bonds except in times of national emergency and unless there is a clear plan for repaying the debt.

And in the Senate, there will be another attempt to pass balanced budget legislation, budget committee aides say. But does this mean Congress is really ready to address the deficit issue? Only time will tell. In 1978 the Congress committed itself to balance the budget by 1981, but in early 1981 the law was rescinded. ■ MARK CRAWFORD

The Global Flight Over Plant Genes

Developing and developed countries face off at a recent FAO meeting over access to germplasm

WHILE most developing countries are rich in native genetic diversity in plants, developed nations are paupers—the United States included. If American farmers were limited to growing native crops, they would be harvesting not wheat, corn, and soybeans but merely cranberries, blueberries, Jerusalem artichokes, and pecans. Yet, with the breeding of imported plant varieties, such as Chinese soybeans and Latin American maize, the United States and other industrialized nations have become major food producers.

That dichotomy has ranked Third World countries and has led to a controversy over the control of resources of plant germplasm, such as seeds and plant tissue. Two years ago, the debate came to a boil at a meeting of the Food and Agriculture Organization (FAO) when many developing countries, feeling exploited by advanced nations, endorsed a resolution that all germplasm, in-

cluding the proprietary lines of seed companies, should be freely available to all countries. The United States was virtually alone in vigorously opposing the idea that the breeding stock of commercial companies, the result of decades of crossbreeding and a lot of research money, should be available gratis.

Now the politics and the issues of the debate are shifting, according to representatives of developing countries, activist groups, U.S. government officials, and the American agricultural community. At a November meeting of the FAO, a few key developing countries that initially supported the International Undertaking on Plant Genetic Resources, such as Brazil, expressed second thoughts about the resolution. At the same time, however, many developing countries have urged FAO to take more direct control over a loose network of plant gene banks located around the world, a