

sector of constituents. The subcommittee intimated that given the current budgetary times, the initiative would be equally unpopular in competition with space research programs and the like. Yet Traficant plans to try again, after making some revisions to the bill, next year.

NSF Receives Good News From Congress

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Last week, the House passed the final National Science Foundation (NSF) funding bill more than doubling the President's budget increase for the agency for fiscal year 1995.

NSF's total budget will increase by 13.8% to nearly \$3.4 billion. However, 5.4% was allocated for research and related activities, which was below the President's request.

Indeed, there were winners and losers within this budget category. For example, \$6 million was allocated for a center or a consortium for global climate change for the human dimensions of climate change, but \$33 million was cut from the overall global climate change initiative. About \$15 million was also slashed from the high-performance computing, while \$5 million was earmarked for the human capital initiative. Another \$1 million went to establish a national center for environmental research, a signal that supporters of a National Institute for the Environment interpret as a high sign for the separate pending proposal.

NSF's Major Research Equipment account will receive \$126 million for the Laser Interferometer Gravitational Wave Observatory (LIGO) and the GEMINI telescopes, \$35 million of which was a reappropriation.

The final bill also carried good news for universities in the battle to recover indirect costs. The bill allocates \$250 million for activities by the infrastructure of academic research. The appropriation also comes with a "string" attached. Under the conference report, NSF must request at least \$250 million for infrastructure activities in the fiscal year 1996 budget or the additional \$131 million of this appropriation will be rescinded as of July 15, 1995. The conference report also calls for the establishment of a 5-year, interagency strategy on research infrastructure. —*With reporting by Richard M. Jones, American Institute of Physics*

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Time to Reset the Great Count

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I have come to a similar conclusion as Emiliani [1994] in one main point: that marking time from the event of Christ's birth has no significance for many of the world's cultures; indeed, the ubiquitous spread of the common era count is a common error [Volk, 1995]. Thus perhaps Agnew [1994], who believes that "Emiliani is the only person who has trouble with our calendar," should talk to some Buddhists or Muslims.

Agnew, however, does damage Emiliani's proposed solution (to start a new great count at the beginning of the Holocene by establishing the birth of Christ at the year 10,000), which Agnew points out is too arbitrary. And, I might add, Emiliani's suggestion continues the essential cultural error—Christ's birth is now merely offset by a power of ten. This was also noted by Schaffer [1994].

All precise past events that could serve as great count initiations (the birth of Christ, the death of Buddha, the original Woodstock Rock Festival) lack the quality of being meaningful for all the world's peoples. Restarting the great count, therefore, must await some future moment, because only now is the world sufficiently linked to incorporate such a moment into its global culture.

What could be the event? A comet impact? The cessation of the North Atlantic Deep Water? A great famine? Consider a

more positive possibility [Volk, 1995]: When the world is ready to accept a unifying great count, that very acceptance would be the remarkable event. An agreement to reset the count (for example, through a vote in the United Nations) would be by itself of sufficient historic import to kick off the new year 1—the agreement to start would be the event celebrated by the start.—*Tyler Volk, Earth Systems Group, New York University, New York, N.Y.*

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AGU

Science Education Crisis: Problems, Solutions Discussed

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Public concern about the state of science education in America at the pre-college and college levels is widespread, triggered largely by the perception that we are losing ground in the global economy. Science, and particularly technology, are seen as our most likely sources of recovery. For those who recall the public reaction to the launching of Sputnik by Russia in 1957, the present mood is similar, if somewhat less intense.

AGU members are in a unique position to influence debate about the science education crisis. Many of us, either as experts in some subset of physical science issues, as teachers at the college level, or even as parents observing our children's experiences in elementary or secondary school classrooms, may offer insight to this debate.

To discuss problems and possible solutions for the crisis, AGU sponsored a 1-day workshop at the beginning of the annual Fall meeting in San Francisco. The Pre-College Science Education Workshop was hosted by Ramon Lopez, a member of AGU's Committee on Education and Human Resources and an astronomy professor at the University of Maryland.

Problems

The first session was devoted to assessing the most pressing problems in science education today. Working in small groups, the participants generated a list of 15 problems

that fell into four categories: scientific literacy of the general population; teacher support and professional development; motivation, interest, and attitude of the students; and national policy.

A National Perspective

Currently, three distinct groups are involved in pre-college science education at the national level. Two are involved in curriculum changes: the National Science Teachers Association and the American Academy for the Advancement of Science. The third, the National Science Resource Center (NSRC), is developing a set of science standards similar to the math standards developed by the National Council of Teachers of Mathematics, which were introduced in 1989 and adopted by 41 states. The NSRC standards are voluntary national education standards centered around literacy in a core subject, and they are for all students, not just those interested in further study of science.