

\$600 million to \$8 billion. Funding also is provided for a new space orbiter. The Department of Defense (DOD) is likely to shoulder the \$2.96-billion cost. NASA officials, however, worry about having to pay for \$265 million in costs for maintaining shuttle-related facilities and personnel. Potentially, programs like the Space Station, Advanced Communications Technology Satellite, the Trans Atmospheric Vehicle (space plane), and smaller science programs could be stalled or cut back.

The National Science Foundation's budget stands at \$1622.9 million, less than the \$1685.7 million proposed by the Administration. Of the total, \$1406.2 million is earmarked for research, an 8% increase over 1986. ■ **MARK CRAWFORD**

Education Secretary Uses Harvard Podium To Take Host to Task

A speech by Secretary of Education William J. Bennett to Harvard College undergraduates on 10 October kindled sharp controversy even before it was delivered. Bennett used the Harvard rostrum to subject Harvard and other universities to wide-ranging criticism on educational, political, and moral grounds.

Harvard president Derek Bok reacted to a look at an advanced copy of Bennett's text by issuing a tart statement in which he charged Bennett with engaging in "polemics." In an academic equivalent of equal time, Bok also followed Bennett on the Friday program, making a brief rejoinder to the Education Secretary.

Bennett's speech was part of a weeklong program of undergraduate activities planned to celebrate Harvard College's 350th anniversary. Bennett was invited by dean of undergraduates Archie Epps.

Bennett, who earned a Ph.D. in political philosophy from the University of Texas and a law degree from Harvard, has been a combative Secretary of Education, particularly in conducting a highly public campaign for his own agenda of education reform. In his Harvard speech, a major theme was that students "deserve a university's real and sustained attention to their intellectual and moral wellbeing," and American universities, including Harvard, by and large were not fulfilling that obligation. Most colleges and universities fail to provide a good general education, he said. "Under the justification of deferring to individual choices, much is left to chance." He made clear that Harvard's core curriculum fell short of meeting his standards.

Turning to moral issues, Bennett faulted universities for self-righteousness, charging that universities are quick to "proclaim their duty to address all sorts of things that are wrong in the world," but tend to shrug off problems closer to home such as that of drugs on campus.

Bennett hit hard at what he sees as university laxity in fostering essential traditions of the free exchange of ideas on campus, citing growing signs of intolerance, particularly against "right-leaning speakers." And he scored a pervasive liberal bias in academe, observing that "Most of the people in the humanities and social science departments in the universities stand to the left of center."

Bennett expressed impatience with the universities' obsession with money, noting that higher education "refuses to acknowledge the obvious fact that, in general, it is rich." Higher education lobbyists in Washington he described as "very good at getting their funds from a Congress seemingly enraptured by the pieties, pontifications, and poor mouthings of American higher education."



William J. Bennett: "Pieties, pontifications, and poor mouthing" from higher education.

In his original riposte Bok said:

"Secretary Bennett's speech raises important questions about the role of universities and the education they offer. Instead of pursuing these questions in an informed and sober manner, however, he has followed his penchant for delivering highly publicized polemics against educational practices which he has not studied in detail and policies with which he happens to disagree. In doing so, he sheds more heat than light and squanders an opportunity to make a lasting contribution to educational reform." ■

JOHN WALSH

Hanford Plant Closed Over Safety Violation

Concern for public safety prompted the Department of Energy to close the plutonium production center at Hanford, Washington, on 8 October. The PUREX and the plutonium finishing plants, which manufacture bomb material for the military, may be out of commission for as long as a month while they undergo a management review.

DOE ordered the plants to shut down after workers violated rules that are meant to prevent fission accidents, including, in the worst scenario, a nuclear explosion.

As DOE spokesman Thomas Bauman explained, the decision to close the plants is meant to be a reprimand to the contractor, Rockwell International, for its inattention to quality control. "I don't want to say that these things have been happening all the time," Bauman said, "but we have had several incidents like this."

The latest violation occurred as Rockwell employees were about to move plutonium nitrate from one process area to another through pipes. Safety standards require that every plumbing connection along the route be "blanked off" by a metal block. This insures that if valves are opened accidentally, the material will not flow to the wrong tank. This precaution is necessary because liquids with a high concentration of plutonium must be stored in special tanks that prevent the buildup of a critical mass of fissioning material.

On 29 September, Rockwell workers came close to sending the plutonium along the pipe before inserting the metal blocks. How close they came has not been revealed. In any case, DOE says, it is unlikely that a criticality accident would have occurred because five closed valves blocked the path to the area where a critical mass might have accumulated.

Earlier this year, according to an aide to Washington Governor Booth Gardner (D), the plant managers made a less alarming but more embarrassing mistake. Just before the governor went on a tour of the Hanford facility, workers removed signs warning of radioactive contamination from a spill. Later, the governor learned that the bus on which he rode passed through a contaminated zone and picked up a small amount of radioactivity.

More recently, the *Seattle Times* published an investigative series describing management problems at Hanford as revealed in confidential reports by Rockwell's lead auditor at the site, Casey Ruud. He found problems in plant design, quality control,