

get accelerator in the world, and it is optimally poised to explore many of the key issues in high-energy physics today." But without adequate funding, detector modifications and collider improvements will be delayed or abandoned. Despite Happer's admonition about supporting the injector's upgrade in the 1993 budget, HEPAP endorsed the plan but couldn't agree on how to fund it. In the end HEPAP voted almost unanimously to give Fermilab the \$15 million that Congress appropriated for the upgrade in 1992, even though DOE had suggested withholding the sum.

Beyond the HEPAP and NSAC statements, nearly 100 letters and electronic messages came to DOE—most notably from a group of physicists led by T. D. Lee of Columbia University (see box on page 56). Reactions also came from members of Congress. For instance, Illinois lawmakers warned that they will fight any efforts to cancel Fermilab's main injector improvement, suggesting that they will replay their powerful performance last spring when OMB eliminated \$43.5 million for the upgrade from the 1992 budget (PHYSICS TODAY, April 1991, page 86). "We object to the manner in which the department arrived at its [decision] in its recent priority-setting exercise. Because consideration of the SSC was off the table, the hands of the task force were tied from the outset. We find it highly objectionable that the department has refused to include the SSC in its priority-setting exercise and chosen instead to cut funding in other areas."

Fears for the SSC

In a letter to Watkins, Representative George E. Brown Jr, the California Democrat who heads the House Committee on Science, Space and Technology, said that, given the constraints on the Townes panel, the recommendations... were, in general, highly predictable: They in effect spread the pain as best they could so as not to do irreversible harm... Looking at the short-run practical effect... I fear the SSC may find itself in serious trouble." Brown, a leader in the fight on the House floor this summer to keep the SSC from being cut or canceled from the 1992 budget, said "those opposing the SSC are being provided the leverage they need to once again try to defeat SSC construction in the coming session of Congress." When the Reagan Administration first endorsed the project in 1987, Brown remembered, "the Congress was assured that it would not be funded at the expense of ongoing science and research programs. This

is obviously no longer true... Thus, intended or not, the ground rules provided to the Townes task force are a warning to the other DOE science programs that the increased funding levels required to support the SSC place their programs in peril."

At the second meeting of the Townes task force on 25 November, Watkins spoke about the comments he and Happer received from protesting physicists, lab directors, university administrators and politicians. "The level of unhappiness is about

equal," he said, "and that makes me feel good. I have the intuition that your report is about right." Watkins also told the group that he is "committed to getting as much as I can for the energy research budget." His statement was in contradiction to remarks he made to the same group in September. "I don't think you need to be discouraged that this [scenario of 10% cuts in programs] is the end product... I will be pushing very hard to jack up the numbers."

—IRWIN GOODWIN

WASHINGTON INS & OUTS WITH THOMPSON'S SUDDEN FLIGHT, NASA SEEKS A CHALLENGING CRITIC

To the complete surprise of everyone at NASA, James R. Thompson Jr announced on 17 September that he was resigning as the space agency's Number 2 official, effective 8 November. Thompson's announcement came during a meeting at the Johnson Space Center in Houston, where the "blue ribbon" Augustine committee had been reassembled to discuss NASA's response to the panel's sobering report on space policies and agency management (PHYSICS TODAY, April, page 87). The panel, which took its name from the chairman, Norman R. Augustine, chairman and CEO of Martin Marietta, had counted on Thompson to help reshape the agency. Instead, Thompson, a 25-year veteran of the space program, said he decided to leave because of pressing health problems in his family.

Thompson earned a reputation in Washington for his candor, confidence and combativeness. He refused to be bullied or blamed by members of Congress or officials in the Administration and often stubbornly defended NASA programs and policies against what he considered unfair or unfounded attacks.

On the eve of his departure from NASA, Thompson received a letter from Berrien Moore II, a mathematician at the University of New Hampshire who heads the agency's Space Science and Applications Advisory Committee. After the customary plaudits for Thompson's contributions to the space program, Moore wrote: "What may be less well known has been your wise, challenging and occasionally irritating counsel that you have provided openly to the space science community. No one, and particularly a scientist, likes to be told that he or she was wrong or acted stupidly. When it has been valuable,

you have done so with flare, insight and humor, and as a consequence we have all benefited. Your intense participation in the space science program has become a bellweather which will be difficult to replicate. It is hard for us to imagine a NASA without J. R., but frankly at times it was hard to imagine a NASA with J. R."

Having earned an MS in mechanical engineering from the University of Florida in 1963, Thompson joined the Marshall Space Flight Center in Huntsville, Alabama, as a liquid-propulsion engineer. He played a key role in the Skylab project, and in 1974 he was chosen to manage the development of the space shuttle's main engine, which required a long leap in NASA's rocket booster technology.

In 1983 he left NASA for a managerial position at the Princeton Plasma Physics Laboratory, but he was brought back to the agency to head the Marshall Space Flight Center after the Challenger debacle in 1986 had just about destroyed the nation's confidence in Marshall's leadership. James C. Fletcher, who himself was called back from retirement after Challenger to once again serve as NASA administrator, told Thompson his job was relatively simple: Restore the shuttle to safe and reliable flight.

Vice President Quayle and leading members of Congress are pressing Richard H. Truly, NASA's current administrator, to avoid selecting an insider for Thompson's post. Representative George E. Brown Jr, the California Democrat who heads the House Committee on Science, Space and Technology, argues forcefully for an outsider who can shake up the agency and calm down the criticism. Truly frankly admits that Brown's criteria are a tall order.

—IRWIN GOODWIN ■