



Cool reaction. Panel says U.S. should rethink plan to develop this Russian reactor for space.

End of Space Nuclear Reactor Program?

The Russian device seemed like a lucky windfall from the Cold War's end, but now it seems headed for the scrap heap of history, a victim of agency wrangling and the uncertain future of space exploration. A report released last week urges that the Defense Department's (DOD's) Topaz program, which is based on a Russian space nuclear reactor, either be revamped and merged with another DOD program, or killed—and observers say the latter is more likely.

The program began 5 years ago when the United States bought six space nuclear reactors from Russia and set up a joint program for testing them. Such reactors offer one of the few practical ways to send large robotic spacecraft to the outer solar system or carry humans to Mars. Topaz has spent \$80 million so far, much of it at Russian

research institutes. Sending nuclear reactors into space is politically unpopular, however, and DOD and NASA don't have any missions planned that would use the technology. The reactors are currently being tested for use at power levels so low that solar or chemical energy sources can do the same job, making them redundant. And the program has drawn opposition from agency supporters of competing U.S. nuclear power systems.

Now a National Research Council panel says the program "should be discontinued as soon as possible"—unless it is used for long-term studies on reactors within DOD's thermionics program. Neither NASA nor many DOD officials, however, are likely to support keeping Topaz alive. "I think it's extremely unlikely," says one analyst.

United Front For Public Science

In March, it's the Westinghouse Science Talent Service, sponsored by the nonprofit Science Service. In April, it's National Science and Technology Week, courtesy of the National Science Foundation. Last month the

White House awarded the National Medals of Science and Technology. Wouldn't coordinating these and other public celebrations of science—perhaps even during the same week—be a better way to foster scientific literacy?

Last week Bruce Alberts, president of the National Academy of Sciences (NAS), convened two dozen leading science policy-makers to consider that question. Their answer was a resounding yes. The group agreed to work together to find ways to make a bigger public splash with the events their organizations sponsor. "The goal is to create a critical mass of events," says NAS spokesperson Susan Turner-Lowe. "And Bruce is willing to coordinate the effort because public understanding of science is very, very high on his agenda."

The group hopes to meet again later this summer. With schedules tight and some events planned years in advance, participants say, it may be hard to forge closer links. And some activities are best handled at the local level, they say, and tailored to the interests of a smaller audience. But whatever the venue, there is agreement that the research community needs a united front to improve the visibility of science.

Varmus's RAC Attack Worries Congress

Even before it hit the streets, a proposal to abolish a decade-old government forum that reviews human gene therapy is drawing fire from Congress. On 26 June, four congressmen led by Senators David Pryor (D-AR) and Mark Hatfield (R-OR) wrote Harold Varmus, director of the National Institutes of Health (NIH), to "express our concerns" about Varmus's announced plan to do away with the Recombinant DNA Advisory Committee (RAC) and replace it with a smaller advisory panel (*Science*, 17 May, p. 945). The letter, also signed by Representatives Henry Waxman (D-CA) and Ron Wyden (D-OR), urges Varmus to reconsider.

The lawmakers' interest may have prompted NIH to delay publishing its proposal to overhaul RAC. But Varmus's staff says no substantive changes are being made in the plan, which was first disclosed in May. Instead, NIH is adding a longer explanation of its goals and allowing more time for public comment. (The text was to appear in the *Federal Register* in May with 15 days for comment; now it seems likely to run in July.)

The flap arose after Varmus announced that he wanted to replace the unwieldy 25-member RAC with a smaller group that would think about ethical and technical issues in experimental therapies and offer its advice. Unlike RAC, this panel would not conduct detailed, case-by-case safety reviews. NIH officials say the new panel might still examine a protocol in detail as a case study if it wished. Meanwhile, NIH will continue to collect data on gene therapy trials and make them available to the public.

Senate staffers say they were concerned that ending RAC might create a perception that NIH grantees wanted to avoid scrutiny. Instead of proposing to abolish RAC, they say, NIH might focus on improving it.

NSF Favors Public Communication in Private

Communicating with the public about science is a top priority for Neal Lane, director of the National Science Foundation (NSF). Perhaps even more important than communicating with the public's elected representatives.

Lane had agreed to testify on 26 June before the House science committee on the first day of a two-part hearing on how the Administration's plan to balance the budget would affect federal R&D. The hearing was expected to be contentious, with committee chair, Representative Robert Walker (R-PA), grilling Administration officials on how they could reconcile promises to protect research with a projected 24% decline in R&D spending by 2002 (*Science*, 17 May, p. 941). Lane was to be joined by the head of the Office of Management and Budget (OMB), and followed on 17 July by NASA director Daniel Goldin.

But 2 days before the hearing, Lane informed the panel that "a scheduling conflict" would prevent him

from appearing. The conflict? A gathering of the National Academy of Sciences' (NAS's) Government-University-Industry Research Roundtable, which meets three times a year to discuss the health of the U.S. research enterprise. The closed meeting, planned for weeks, featured tips from media experts on how policy-makers could improve their communications skills. Lane was a major organizer of the event, say NAS officials. The same day, OMB told Walker's panel that the appointment of its director, Alice Rivlin, to the Federal Reserve Board would force it to bow out, and NASA said Goldin would be in Russia with Vice President Gore on 17 July.

Walker blasted the no-shows in a press release, saying he was "frustrated" and "concerned," and vowed to reschedule the hearing. NSF officials say Lane was not pressured by the White House to drop out, although a senior aide confesses that Lane did not relish being alone in the hot seat.