

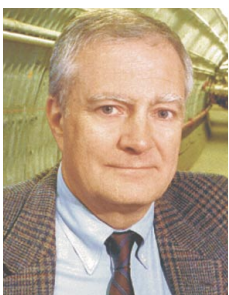
Marburger Focuses on War against Terrorism

When John Marburger became the director of the Office of Science and Technology Policy (OSTP) on 23 October, his appointment was greeted with both enthusiasm and skepticism in the science community. Marburger, the respected director of Brookhaven National Laboratory before coming to Washington, was considered a good choice for the job by most political observers, including several past presidential science advisers. The concern wasn't with Marburger, but with President Bush, who had left the OSTP position vacant for nearly six months.

During that time, the administration made pronouncements on global warming, arsenic levels in water, stem cell research, and a few other science-related issues that gave the science community pause. "There were a number of decisions early on where the president didn't have all of the advice that he needed" said Neal Lane, President Bill Clinton's science adviser. "But maybe those missteps led the president and his policy advisers to realize that 'we do need somebody in here that knows science.'"

Marburger has moved quickly onto the Washington scene, driven in large part by the government's urgent need for sound science and technological advice in the war on terrorism. Indeed, several days before he was sworn in, Marburger called together more than a dozen federal officials who administer the \$90 billion US R&D portfolio to see what tools were available to fight terrorism.

While the war on terrorism has given OSTP new importance, Marburger's status within the administration is not on the same level as his recent predecessors. He does not have what the past few science advisers have had—the title "assistant to the president." And, as part of the response to the 11 September attacks, the OSTP offices were relocated from a difficult-to-protect section of the Old Executive Office Building next to the White House to a building several blocks away. Eventually OSTP may return to its old offices, but until then Marburger's physical distance from the realm of the White House is not a good thing in the subtle power game in Washington. In addition, he does not have assured direct access to the president, something that many past



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science advisers have had.

Marburger has routinely brushed off questions about his standing in the administration. During his 9 October confirmation hearing before the Senate Committee on Commerce, Science and Transportation, Marburger said he had been "delighted with the encounters I have had with White House staff. They have welcomed me, and I feel good

vibes with this organization, so I have agreed to accept this position without reservations, and I expect that when I have something important to say, the president will hear it either directly from me or through the people that I am talking with."

In an interview with PHYSICS TODAY in late December, Marburger offered his views on a number of issues, including how he plans to run OSTP and how the office fits into the Bush administration.

PT *The events of 11 September have changed the federal government's priorities, and science and technology are taking on new importance in the war on terrorism. How have the terrorist attacks redefined OSTP's mission?*

MARBURGER Well, I'm redefining it. The fact is the war on terrorism is the number one priority of this administration and there is a lot to do in the technical aspects of the responses to terrorism and I'm trying to organize that. OSTP is providing technical support for the Office of Homeland Security and we're reorganizing some of the cross-cutting working groups that have been established in the past under the National Science and Technology Council.

Of course, the other [nonterrorism] issues we deal with are continuing. We have important cross-cutting committees on things like bioethics, climate change, food safety, a long list of things. OSTP provides technical support for the activities of the administration.

PT *C. Paul Robinson, the director of Sandia National Laboratories, said after a recent Department of Energy meeting on technology to fight terrorism that funding at the national labs is usually feast or famine, and with the counterterrorism efforts, it will now be a feast. But there is a concern in the scientific community that other science programs might suffer. Is that a valid concern?*

MARBURGER The president really doesn't want to see the US lose its science leadership while we're waging war against terrorism. It's up to me and Mitch Daniels [director of the Office of Management and Budget] to make sure that doesn't happen. Sure, there are going to have to be a lot of tough decisions made regarding priorities. We are going to have to have cooperation from the science community to help make the priority decisions. But the aim is to keep science strong, not to go backward.

PT *How does the shifting landscape, the emphasis on terrorism, change things for research physicists?*

MARBURGER One of the things it changes is an increased emphasis on making it clear what the criteria are for investing in one project rather than another. I know there is a lot of nervousness right now about this administration's management style, which is really requiring an identification of performance measures. That sounds ominous to a lot of basic science researchers, but there is no desire to make basic science accountable in the same kind of bottom-line sense that a business has to be accountable.

But we do make choices in science based on judgments of what sort of science will have the greatest potential for discovery. And discovery is a perfectly legitimate payoff. But some discoveries are acknowledged to be more significant than others and scientists make those judgments all of the time, usually in the peer-review process. The idea is to translate those judgments into something the American public can understand.

For sure, during the war on terrorism you can expect that only a few areas of science are going to get large infusions of new money. The president has already made the decision that, in the short term he's decided that the payoff for health research is going to be very great. Therefore, he made a commitment to increase the NIH [National Institutes of Health] budget substantially, and that's a major policy driver for the president. But that doesn't mean that other initiatives may not receive emphasis in the future. People are interested in seeing the information technology revolution continue. We're a world leader in information technology and we have to remain the world leader. The same thing is true with certain physical science capabilities. The nanotechnology initiative is probably the broadest one you can point to in this category. We

all want to fund it, so there will be some evidence in the budgets that the president feels this is important.

PT *How do you convey the importance of funding science to policymakers in the administration and on Capitol Hill who are not scientists?*

MARBURGER I invite them to lunch and talk to them. I invite them to briefings. I go to their meetings, and I go to meetings with the budget folks. I give them my views and they give me theirs. I know that one of the functions of the science adviser, high up in an administration, is to increase the level of understanding of how science works. I carry that out by talking to everybody I can.

PT *Past science advisers say that access to the president is important if you are to be effective. You have said that when you met with President Bush to discuss this job, you didn't "insist on being able to pick up the telephone at any time and talk with him." What is your relationship with the White House?*

MARBURGER Each administration has a different flavor, a different set of characters, personalities that you have to deal with. And the tactics of the job are going to differ dramatically from one administration to another. This happens to be a very businesslike administration and I like that because it means that you can talk about being effective, and you can argue on the basis of cause and effect, or what the consequences are.

PT *Many scientists were concerned in the first few months after the election about President Bush's apparent lack of regard for science. Did you share that concern prior to your selection?*

MARBURGER I didn't have a concern, but I also didn't have any feeling for how the administration felt about science. There were very few statements [on science policy] and it was really hard to tell. Very quickly I learned that this administration, starting with the president, has a lot of respect for science. I've found no trace of antagonism or lack of respect for science.

PT *Several former science advisers said the lateness of your appointment could put you at a disadvantage in establishing yourself in the administration. How has the president's staff received you?*

MARBURGER That's worked out. It could have been a concern, but the events of 9-11 made that issue go away because it was clear that the war against terrorism, and homeland security, were going to be highly technically oriented. So, in a way, I think that the events of 9-11 have helped to

reestablish this office as being important in the policy process.

PT *Yet you don't have the title of "assistant to the president" as your predecessor did. What does the loss of that title mean?*

MARBURGER The only thing that's changed, as far as I can tell, is the title, the detailed title. Starting with the first Bush administration, the science adviser acquired the title of "assistant to the president" in addition to "director of OSTP." In the administration since then, that practice was followed. In this Bush administration, they decided that there has been a title inflation, that there were just too many people with that title [assistant to the president], so they wiped out a whole bunch of them, including this one. And, frankly, I haven't seen that it has made a bit of difference. It hasn't been a problem. My access [to the White House] is as much as I ever would have hoped for.

PT *On several critical scientific issues, such as global warming and stem cell research, the political concerns don't necessarily mesh with the science. Are you comfortable being in the middle of that?*

MARBURGER You have to be. First of all, it really is my responsibility, and the president expects me to do this, to tell him honestly what the science says about these issues. He relies on me and my office to give the best possible science advice. The integrity of my office depends on being very clear about what is science and what is not. As long as policymakers know what the consequences are, so that they can make their decisions with their eyes open, my job has been done.

PT *Beyond that, do you see yourself as a coordinator between agencies and outside groups, as the one who makes sure that everyone is talking with regard to science?*

MARBURGER That's right. We have frequent meetings with different representatives from different agencies in a fairly well-defined context, and we try to understand what the issues are and what the capabilities are and what everybody is doing so that we can help them. A lot of people looking at this process of how the government does its work . . . are put off by the complexity of it. But complexity is not surprising for a nation the size of, and with the diversity of, the US. Secondly, complexity doesn't mean chaos. The government is a machine, and this machine has components that are designed to help make it work, and OSTP is one of the devices by which this complexity gets mastered in the policy-making process.

JIM DAWSON

UK Joins ESO

After dragging its feet for years, the UK is joining the European Southern Observatory in July. The move will give the country's astronomers access to the Very Large Telescope (VLT) and ESO's other facilities in Chile (see PHYSICS TODAY, September 2000, page 55). The UK will be ESO's 10th member state.

Joining ESO also assures UK astronomers a role in planning the 100-meter Overwhelmingly Large Telescope and other future projects that are too costly for the country to afford alone.

"This is fantastic news for Britain. It's like Christmas," says Richard Ellis, a former director of the University of Cambridge's Institute of Astronomy who is now at Caltech. British astronomy had slipped since its peak in the 1970s and 1980s, when it commanded about 15% of the world's 4-meter telescopes. The UK currently has the equivalent of half an 8-meter telescope—one-quarter shares in each of the Gemini twins—or about 3% of existing and planned 8-meter telescopes, says UK Astronomer Royal Martin Rees of the University of Cambridge. Joining ESO, he adds, "restores the UK's full competitiveness with the countries of mainland Europe. Moreover, ESO, with UK participation, can quite reasonably aspire to forge ahead of the US in ground-based astronomy. So this development is not only good for the UK, but good for European science as well."

But it won't be pain free: Cuts of some £5 million (\$7.2 million) a year in existing programs are the government's condition for paying £10 million toward the £12 million annual ESO dues. So the Particle Physics and Astronomy Research Council (PPARC), the UK funding agency responsible for astronomy, is chopping the country's share in, and the total running budget of, the Anglo-Australian Observatory in New South Wales—the facility it chose over ESO for Southern Hemisphere stargazing 40 years ago. The UK will also with-



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