SCIENCESCOPE

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NASA Has Something to Declare

International cooperation is a weighty phrase that doesn't necessarily impress Russian customs officials examining foreign scientific instruments. But that will change if discussions between Vice President Al Gore and Russian Prime Minister Viktor Chernomyrdin next month succeed.

The problem arose last summer, when customs officials at Moscow's Sheremetyevo airport blocked the delivery of equipment for next year's rendezvous of NASA's space shuttle with Russia's Mir space station. The customs officials wanted someone to pay a landing fee, although the government had decreed there would be no such tax, says one NASA official. Pleas from Russian Space Agency Director Yuri Koptev had no effect.

Red tape. Sheremetyevo Airport in Moscow is now a bottleneck for NASA scientists.

The destination of the equipment, which included health-monitoring sensors and computers, was the NPO Energia factory across town, where workers will integrate it into the Spekter module slated for a shuttle launch next spring. Astronauts and cosmonauts will use the scientific laboratory to conduct experiments on the health effects of microgravity.

Customs officials eventually accepted the imports, NASA Administrator Daniel Goldin told the American Astronautical Society at its annual meeting last week in Washington. But Goldin and Koptev don't want it to happen again, so they have asked Gore and Chernomyrdin to approve a special protocol intended to make it easier for scientific equipment to pass across Russian borders. The two leaders plan to meet in Moscow in mid-December.

Dingell's Committee Faces Pruning

Two weeks after their stunning election victory, Republicans in the House of Representatives are locked in a battle over how to reduce the 118 subcommittees and 22 standing committees while still providing enough spoils to senior Republicans eager to replace their Democratic colleagues as chairs. But big changes could be in the offing for a committee that has had a major influence—moral and financial—on science: the Energy and Commerce Committee.

This powerful committee, which Representative John Dingell (D–MI) has ruled with an iron hand since 1981 and which has proved to be the scourge of scientists accused of misconduct, may be on the verge of a drastic downsizing. Representative David Dreier (R–CA), who is leading a partisan team to reorganize the House, proposes moving oversight of the entire Department of Energy (DOE) out of Energy and Commerce and passing it to the House Science, Space, and Technology Committee, creating a new Committee on Science and Energy. (The science committee already has jurisdiction over DOE civilian research.)

But the shift is far from certain. Representative Thomas Bliley (R–VA), who wants to replace Dingell as panel chair, takes a dim view of the idea, say congressional staffers. "He hasn't been waiting all these years to take over the shell of a committee," says one House aide.

Despite that disagreement, Republicans are reaching accord on other key changes. Last week Representative Bob Livingston (R–LA) said he has accepted the chairmanship of the powerful House Appropriations Committee, which disburses tax money to federal agencies. Other chairs and party leaders will be chosen on 5 and 6 December when House Republicans convene in Washington.

Germans Discover New Element

A team of heavy ion physicists—the modern-day equivalents of alchemists—last week claimed to have created a never-before-seen atom, called, for the moment, element 110. Researchers at the GSI heavy ion research laboratory at Darmstadt, Germany, said they had found three atoms of the new element. "This is proof already," says Sigurd Hofmann, head of the detector team at GSI.

Uranium, named element 92 for the number of protons in its nucleus, is the heaviest element that occurs naturally on Earth, but physicists have created every element from 92 through 109 in reactors and particle accelerators over the past 40 years. Researchers at GSI are the current masters of this black art, having been the first to create elements 107, 108, and 109 in the 1980s.

To create element 110, the team spent several years tweaking their equipment. On 7 November they began bombarding a thin foil of lead with an intense beam of nickel ions in an attempt to fuse nuclei into heavier forms. Two days later, a nucleus embedded in their silicon detector decayed to produce the characteristic string of four alpha-particles predicted from element 110. Later, they found two more.

"We are delighted by the discovery," says Rayford Nix, a theorist at Los Alamos National Laboratory in New Mexico. "It's in keeping with all our predictions."

Clinton to Seek Better Radiation Regs

How much radiation in the environment is safe? For years federal agencies have debated the issue, which is central to resolving such questions as how many billions of tax dollars should be spent on nuclear-waste cleanup at the weapons labs. But the Clinton Administration is determined to break the deadlock: Next month, the White House Office of Science and Technology Policy (OSTP) is expected to create a new interagency panel to harmonize radiation standards and set priorities for radiation research.

This won't be the first effort to get federal radiation gurus in step. In 1984, former President Ronald Reagan created the Committee on Interagency Radiation Research and Policy Coordination (CIRRPC), with representatives of 18 federal agencies, to set radiation guidelines. CIRRPC has, among other things, helped the National Institutes of Health devise tables on the probability of getting cancer from various radiation sources.

But a report released earlier this year by the congressional General Accounting Office charged that CIRRPC and the Environmental Protection Agency (EPA) "have coordinated federal radiation policy ineffectively." Last month, Senator John Glenn (D–OH), who commissioned the study, told EPA to redouble its efforts to eliminate the problem.

OSTP has little say in how EPA regulates radiation exposure, but it can—and does—plan to replace CIRRPC as a first step in finding answers. According to a White House official, OSTP will create a radiation panel within the new National Science and Technology Council that will "respond to criticisms and do a better job at getting the agencies to agree on radiation policy." Meanwhile, EPA and other regulatory agencies will still be allowed to set their own policies—but only, it is hoped, after consulting the new panel.