

cut back production. Another change, says Sieminski of Washington Analysis, is that suppliers are refining and distributing more petroleum products in Europe and the United States. An embargo, would damage their own sales, he notes.

Nevertheless, there are growing calls for strong federal measures to reduce the impact of cheap imports on the trade deficit and on the domestic energy industry. The Reagan Administration and the Congress, however, have refrained from interfering in the marketplace—at least partly because purchases of Persian Gulf oil have been cut.

The options for controlling imports, Martin said recently at a conference on energy problems, include switching from oil to gas, greater reliance on coal, stockpiling more oil, stepped-up exploration, and, where possible, expanding the use of nuclear power. Bush also would provide the oil industry with new tax breaks to help lower domestic production costs and to increase petroleum exploration activities in the country.

Martin contends, and many economists

agree, that a tariff on imported oil, while helpful to domestic producers, would penalize the overall U.S. economy by raising energy prices. A gas tax would not help either because it only raises the prices at the pump, not at the wellhead. Bush also is against imposing stricter mileage standards on automakers, even though almost half of the 9.75 million barrels of petroleum consumed each day in the U.S. transportation sector is used in cars.

Dependence on a volatile political area like the Persian Gulf, says Martin, "is not a happy situation." But there are few signs that this dependence will diminish.

■ MARK CRAWFORD

ADDITIONAL READING

Basic Petroleum Data Book, vol. VIII, no. 3 (American Petroleum Institute, Washington, DC, September 1988).

World Oil Trends (Arthur Anderson & Company, Chicago, IL; Cambridge Energy Research Associates, Cambridge, MA, 1988).

E. R. Fried and Nanette M. Blandin, *Oil and America's Security* (The Brookings Institution, Washington, DC, 1988).

U.S.—Soviet Weapons Journal Launched

"There's an interesting philosophical question," said Roald Sagdeev, the Soviet space research director, taking a cue from reporters who had come to lunch to hear about a new U.S.—Soviet journal on arms control. Sagdeev and Frank von Hippel of Princeton University will cochair the editorial board. Harold Feiveson of Princeton will be the editor. The reporters wanted to know who would underwrite it. "Taxpayers can support the arms race, no question about it," Sagdeev said. "But when it comes to arms control, maybe it's too expensive . . ."

The journal, to be called *Science & Global Security* will debut next spring backed entirely by private funds. Its aim is to provide a high-quality forum in which to discuss technical issues in the furtherance of arms control. The main backers at present are the U.S. company, Gordon and Breach Science Publishers, and Mir, the Soviet publisher of *Scientific American*.

Incorporating the project was an adventure in itself, says von Hippel. When it was conceived last year, there was no precedent for an independent, privately backed venture of this kind in the U.S.S.R. The founders insisted that it be private to remain entirely free of political coloration. They met with Soviet Premier Mikhail Gorbachev nearly a year ago, and with his endorsement, von Hippel says, "I thought the skids were greased." But the Soviet government, moving at glacial speed, did not grant an official

license until this October. The journal received a precedent-setting permit to operate as a nongovernment publication and raise private funds within the Soviet Union. It will come out simultaneously in Russian and English, four times a year.

According to Feiveson, 4 years of planning lie behind the effort. The first two issues have already been put together in draft form. They will include articles on a cooperative U.S.—Soviet research program to monitor low-yield nuclear tests; a feasibility analysis of banning nuclear reactors from space; a technical discussion of cheat-proof methods for dismantling nuclear warheads; and a discussion of prospects for U.S.—Soviet cooperation in space.

The editorial board also includes Herbert L. Adams of Stanford University, Vitali Goldanskii of the Soviet Institute of Chemical Physics, John Holdren of the University of California at Berkeley, Col. Thomas Johnson of the U.S. Military Academy at West Point, Sergei P. Kapitza of the Vavilov Institute of Physical Problems in Moscow, Franklin Long of the University of California at Irvine, Milo D. Nordyke of the Lawrence Livermore National Laboratory, Theodore Postol of Stanford, George Rathjens of the Massachusetts Institute of Technology, Stanislav N. Rodionov of the Institute of Space Studies in Moscow, and Evgenii P. Velikhov of the Soviet Academy of Sciences.

■ ELIOT MARSHALL

SSC Report Attacked

A recent report by the Congressional Budget Office (CBO) on the promises and possible pitfalls of the Superconducting Super Collider (SSC) has not been well received by Robert O. Hunter, Jr., director of the Office of Energy Research. On 9 November, Hunter fired off a letter to James Blum, acting director of CBO, complaining that the report's cost projections for the SSC were "simplistic" and inaccurate.

The report, *Risks and Benefits of Building the Superconducting Super Collider* (see *Science*, 14 October, p. 186), used an average of cost escalations incurred by a series of accelerator projects to give Congress an idea of how SSC costs might grow. The report suggested that if an average increase of 46% were applied to the SSC, costs could reach \$6.4 billion. Hunter says the "logic of this approach is essentially invalid" because it relies on a sample size of four. Furthermore, the magnet technology developed at Fermi National Accelerator Laboratory, he adds, means that the SSC "does not require major component development, and consequently can be costed with confidence."

Hunter also faults CBO's comparison of the SSC with other potential accelerator projects—Europe's Large Hadron Collider (LHC) and a new linear electron-positron collider. He says it is not accurate to portray the SSC as the most expensive of the near-term options when the full costs of the LHC are not known and when a conceptual design report for the linear electron-positron collider is years away from completion.

"The department continues to believe that all evidence demonstrates compellingly that the Super Collider can be built within our previously announced cost estimate of \$4.4 billion [\$5.3 billion with inflation]," says Hunter.

■ MARK CRAWFORD

Thomas to Leave EPA

Lee M. Thomas announced last week that he plans to leave his job as administrator of the Environmental Protection Agency on 20 January, the last day of the Reagan Administration. He has headed the agency since February 1985, when he succeeded William Ruckelshaus. He did not reveal his future plans. Thomas previously served as assistant administrator of EPA in charge of toxic wastes and the superfund program. He kept a low profile during his tenure as administrator, in sharp contrast to Ruckelshaus's predecessor, Ann (Gorsuch) Burford who resigned under fire in 1983.

■ COLIN NORMAN