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Science's Open Secret

The quest for knowledge is necessarily an open process, and national security requires secrecy. Hence an inevitable tension between scientists and security officials. But that tension has recently turned into frank hostility. In the latest of several imbroglios, the organizers of a laser-optics conference last month were compelled by guardians of military secrets to withdraw a quarter of the papers they planned to hear.

Now the National Academy of Sciences has responsibly addressed the problem. Although it essentially supports the scientists' side of the argument, it should help heal the breach.

When the Soviet physicist L.I. Rudakov toured the United States a few years ago giving lectures on fusion energy research, American security officials followed him with warnings that his remarks were classified as secret. Such zealotry occurs, and the dangers should be obvious. But misjudgments in the opposite direction are harder to prove. Much militarily valuable technical information does pass from West to East. The essential question is how much of this leakage results from open communication among scientists.

The Academy committee, which had access to secrets, examined the known cases of leakage and reports being shown "no documented examples that were the direct result of open scientific communication." Even if some leakage did so occur, it seems minuscule compared with the losses attributable to Soviet spying or legal purchases of equipment.

The committee is right to conclude that scien-

tific inquiry should remain open except in cases directly involving military secrets; the costs - to scientific and technical advance — of even a small step toward censorship would be too high. Specifically, it warned against extending the Export Administration Regulations to university research, as security officials have tried to do.

But the committee notes the view of Adm. Bobby Inman, former Deputy Director of Central Intelligence, that university research may become a more serious target of Soviet interest as other technology leaks are cut off. The intensity of the Soviet collection effort is not fully recognized by scholars; an army of 100,000 sleuths, says the Academy, is translating and disseminating American data published by the Commerce Department.

Whether such research is easily turned into military advantages is open to question. Soviet weapons designers are so conservative and compartmentalized that they are slow to adopt innovations. Security controls can never do more than slow the rate at which American information is lost, and the Soviet Union's internal arrangements may be the best available protection.

What needs above all to be recognized is that America's preeminence in military technology has much to do with its preeminence in civilian research. And that depends mightily on the ability of American scientists to communicate among themselves and with scientists abroad. The vitality of American science and technology is the practical as well as philosophical priority. It requires a maximum of communication, for which the occasional leak is a small price to pay.