

Congress warns nuclear labs of spy risk

[WASHINGTON] The three nuclear weapons laboratories of the US Department of Energy are tightening controls on access by foreign scientists in the wake of growing concern in Congress that the lack of thorough vetting of visitors is enabling foreign intelligence services to spy on them.

The directors of the Los Alamos, Sandia and Lawrence Livermore laboratories told a congressional hearing on 6 October that steps were already being taken to vet visitors more carefully, following a 1997 report from the General Accounting Office (GAO) that attributed security breaches to inadequate vetting.

But Duncan Hunter (Republican, California), chairman of the procurement subcommittee of the powerful National Security Committee in the House of Representatives, which held the hearing, doubts that the laboratories or the Department of Energy are doing enough to vet foreign visitors.

According to one laboratory official, Hunter and other committee members from both parties are "really steamed" about the security issue.

The weapons laboratories have opened up markedly to overseas visitors since the end of the Cold War. According to the GAO, the number of foreign visitors to the three laboratories has grown from around 3,800 in 1988 to 5,983 in 1994 and 6,998 in 1996. Almost one-third of visitors now come from countries that the United States regards as "sensitive" — chiefly India, China and Russia.

Foreign visitors include hundreds from Russian weapons laboratories engaged in 'lab-to-lab' collaborations on weapons issues, as well as some Chinese weapons scientists involved in a far smaller and less formal liaison with their US counterparts.

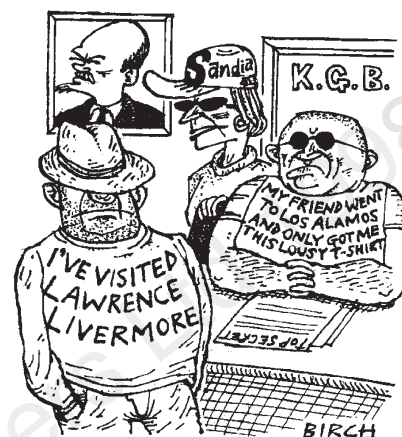
Scientists from all over the world also work with the laboratories on non-weapons-related work, which has expanded greatly since the end of the Cold War, and on topics such as inertial confinement fusion, which is unclassified but could still have weapons applications.

Additionally, the laboratories hire some young scientists who are not US citizens, especially in disciplines where US-born PhDs are in short supply.

Most of these visitors do not gain access to the closed areas of the laboratories where classified nuclear weapons work is done. But Congress is concerned about secret evidence that trained spies have been able to enter the non-classified areas of the laboratories, and perhaps extract valuable information.

According to a GAO report published in September last year, examples of espionage activities against the labs "include recent cases involving the possible theft or compromise of sensitive information in which foreign nationals at the Department of Energy's laboratories played a prominent role". Hunter's subcommittee was extensively briefed on these breaches during a closed session of last week's hearing.

The GAO said that Los Alamos and Sandia



were performing background checks in advance of visits of scientists from sensitive countries in only 5 per cent of cases; in contrast, Livermore performed them on almost half of such visitors. It found 13 cases in which "persons with suspected foreign intelligence connections" were allowed access to Los Alamos or Sandia between 1994 and 1996.

Both the Department of Energy and the laboratories say they are revamping their counter-intelligence procedures and will implement more background checks. At Sandia, for example, a 1997 security review has resulted in new requirements for advanced notice of visits. This may be up to 55 days for scientists from sensitive countries who plan to work for more than a month in a closed part of the laboratory.

"The rules are much, much stricter, and we feel we've got control," says Melanie Flores, head of counter-intelligence at the New Mexico laboratory.

"It adds a little bit of a burden, but foreign visitors tend to plan far in advance anyway," says John Crawford, Sandia's vice-president. The new rules do not deter visitors, Crawford says, but even tighter controls could do just that. "You could tighten things so far that people would be totally discouraged from visiting the labs — it definitely could be damaging," he says.

In testimony to the committee, John Browne, director of Los Alamos, stressed the importance of interchange with foreign scientists: "Without participation in the international scientific community, the credibility of and talent in these labs will wither."

But officials say that Congress is inclined to push the labs towards a more cautious approach to such participation.

The GAO is already working with more than one congressional committee to investigate the subject further. If Congress is not satisfied with the answers, its options include reducing funding for collaborative programmes, and enforcing stricter rules that may keep scientists from sensitive countries out of the laboratories.

Colin Macilwain

Pay crisis drives Russian scientists abroad

[MOSCOW] The flight of scientists from Russia shows no signs of slowing down. The Ministry of Science and Technology released figures last week showing that 15,000 scientists have left the country during the past five to seven years.

The emigrants represent five per cent of Russia's 300,000 scientists. Most went to the United States, with a minority heading for Israel, escaping continued political instability, a crisis over unpaid salaries, and the falling value of the ruble.

The average monthly salary of a scientist in Russia is 1,000 rubles (US\$60). Although this is a 60 per cent increase from 1997, this gain has been wiped out by the devaluation of the ruble in August to 17 rubles per US dollar. Before devaluation, one US dollar was worth 6.35 rubles.

Despite repeated promises, the prospects that salaries will be paid on time remain poor. Initial hopes that the new prime minister, Yevgeny Primakov, himself a fellow of the Russian Academy of Sciences, would resolve the crisis have quickly faded.

Although Primakov has promised to find a solution, he is expected to give greater priority to the plight of miners and teachers, who face a similar crisis.

Primakov has allowed the science and technology portfolio — including virtually all research policy — to remain with Vladimir Bulgak, the deputy prime minister, who was science minister under the previous government.

But Bulgak's ability to lobby for scientists will be limited. He is in overall charge of 18 government agencies and departments including the ministries of transport, fuel and energy, and atomic energy.

In a recent speech, Yuri Luzhkov, the politically ambitious mayor of Moscow, called on Bulgak to "return the lost valuables" to Russian science if impending catastrophe was to be avoided. Luzhkov said that 15 to 20 years are needed for Russia's science to reach the level of developed countries — and then only if financing reaches "adequate" levels.

Carl Levitin