

Hollow arguments against nuclear test ban

The Senate's approach to the Comprehensive Test Ban Treaty will show whether the United States is ready to lead a world emerging from the deceptive simplicities of the Cold War.

The end of nuclear testing in 1992 was, for many, a powerful sign that a more enlightened world might emerge following the collapse of the Soviet Union. The Comprehensive Test Ban Treaty (CTBT), which was signed by 44 countries in September last year, is intended to secure the current voluntary moratorium and must now be ratified by the signatories' individual legislatures in order to take effect. In the United States, President Bill Clinton has just sent it to the Senate, where the support of 67 senators is needed to secure ratification. Without US ratification, the treaty will fail. But as preliminary hearings last week made clear, those 67 votes may prove elusive.

The Clinton administration has laid careful groundwork to build support for ratification. It has pledged to spend \$4.5 billion a year for ten years on an elaborate stockpile stewardship programme, in which the nuclear weapons laboratories will ensure the safety and reliability of existing weapons without testing. That programme was designed to persuade the laboratories to support the treaty and a cessation of tests, but it was never likely to assuage the most ardent proponents of testing. Relatively silent of late, they emerged last week, at the first Senate hearings in the run-up to treaty ratification. They include some nuclear weapons scientists — free to say whatever they like about the plans of their political masters — as well as assorted unreformed cold warriors.

Credibility

To those who would sleep easier at night in a world without nuclear weapons tests, the case in their favour can seem somewhat obscure. But there are at least three reasons which the treaty's opponents give for abandoning it and resuming the tests. Testing, they contend, is the only way adequately to ensure the safety and reliability of existing US weapons. The credibility of the stockpile, in the eyes of potential adversaries, is enhanced by regular testing, they say. The opponents also argue that the United States is technically incapable of verifying others' compliance with the treaty.

In truth, the safety of the US weapons stockpile is not at issue. It sounds good to couple 'safety and reliability' as a justification for testing or for the expensive stockpile stewardship programme. But there is no instance in America's lengthy experience of a safety problem related to ageing. Nor would any such problem be resolved by testing. Reliability, on the other hand, is indeed the main objective of the stockpile stewardship programme, and the main concern of its critics.

The directors of the weapons laboratories say the stewardship programme will ensure reliability, whereas treaty opponents say that testing would do it better. James Schlesinger, the former defence secretary, told the Senate last week that confidence in reliability will decrease little by little, so as eventually to erode the credibility of the weapons, but the United States has not used routine tests to ensure reliability in the past. Schlesinger also suggested that Saddam Hussein was deterred from using chemical weapons in the Gulf War by US readiness to use nuclear weapons in retaliation. It is perhaps a measure of the world-view of treaty opponents that they can make such unwarranted claims for the military worth of nuclear weapons. Perhaps what they really desire is

regular testing as a means to proclaim US military superiority — precisely the type of activity that should have ended with the Cold War.

Verification

The final argument being brought to bear against the CTBT is that the United States will be unable to verify the compliance of other countries. Treaty opponents have made this case, characteristically, by tossing a smoke-bomb into the debate, in the shape of their recent contention that an event near Novaya Zemlya, in northern Russia, was a surreptitious nuclear test.

Premature intelligence reports that Russia had carried out such a test on 16 August were leaked to the press by unnamed government officials. Subsequent study by lay seismologists showed conclusively that the event in question was an offshore earthquake (*Nature* 389, 425; 1997). Although several senators have used the alleged 'ambiguity' of this event to cast doubt on the ability of seismologists to track nuclear tests, the episode in fact serves to demonstrate the opposite.

The aftermath of the Novaya Zemlya incident highlights a thorny issue related to CTBT ratification in the United States — the question of whether verification will be conducted in secret by the Department of Defense and the Central Intelligence Agency (CIA), or in public, with the involvement of a wider scientific community. Although scientists would prefer as open a process as possible, steps may have to be taken to ensure that officials at the CIA and Department of Defense are also satisfied with the process. Responsibility for verification is just one of a number of issues on which the Senate may seek concessions from the administration in exchange for ratification.

Last week's hearings by two Senate subcommittees were but early skirmishes in what is likely to be a protracted ratification debate. The National Security and Intelligence committees will scrutinize the issue before the Foreign Relations Committee, chaired by Jesse Helms (Republican, North Carolina), decides whether to bring the treaty to the Senate floor. Helms surprised everyone last year by ignoring conservative opposition and lending his support to the Chemical Weapons Convention (CWC), which was duly ratified. In this Republican-controlled Senate, however, the CWC benefited from its origins with the administration of President George Bush. The CTBT is Clinton's animal, and prospects for its ratification remain highly uncertain.

Countries such as India are entitled to have reservations about a treaty that leaves the existing nuclear powers with large weapons stockpiles, and the United States, in particular, with an unchallengeable lead in nuclear weapons technology, based on computer simulation. Nevertheless, the arguments in favour of ratification by all the nuclear weapons states are overwhelming. The Senate's actions on this issue will critically define America's role in the 'new world order'. Outright rejection of the treaty risks a resumption of nuclear testing in the United States and elsewhere. If the Senate sits on the treaty indefinitely, an opportunity to start pushing the nuclear genie back into the bottle will be lost — perhaps for ever. The Senate must grasp that opportunity and ratify the Comprehensive Test Ban Treaty in 1998. □