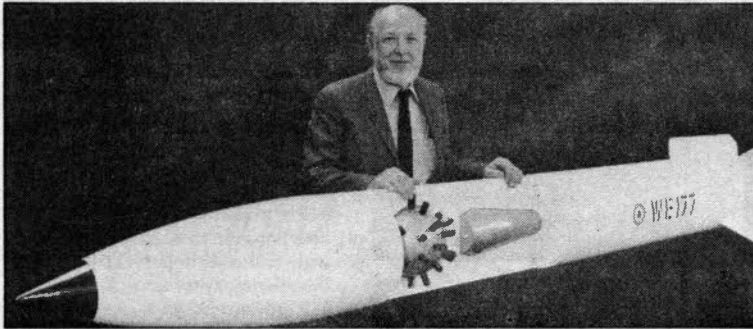


ONLY THE SPECIAL RELATIONSHIP IS STOPPING A BRITISH N-TEST BAN



Ex-director of the Stockholm Peace Research Institute Frank Barnaby with a model of the RAF 'tactical' thermonuclear bomb, the WE177.

The spherical plutonium fission bomb 'primary' is on the left. When this is detonated, radiation reflectors around the secondary (right — reflectors not shown) gather energy from the fission explosion, compressing the secondary and raising it to the temperature of the heart of the sun. This process was described last week as 'lighting up the DT' (deuterium and tritium, the hydrogen bomb 'fuel'). The WE177 is a so-called 'dial a yield' bomb and has a variable explosive power; and 'tuning', it was said, is achieved by re-arranging the secondary so as to burn either more or less thermonuclear fuel.

THE BRITISH GOVERNMENT could carry on building nuclear warheads for Trident missiles, and continue to design modernised nuclear weapons, even if a comprehensive nuclear test ban treaty were to be signed immediately, top British defence scientists said privately last week. There would be only 'some risk' that the resulting weapons would be less reliable

THESE and other insights into British government attitudes to a test ban were offered during a seminar organised by the Council for Arms Control and attended by two of Britain's top nuclear weapons programme executives, both recently retired.

Despite its ability to get around a

nuclear test ban treaty, the present British government has withdrawn from direct negotiations and has continued to back the American position of blocking agreement by raising doubts about the 'verification' of a test ban.

The major (real) western reason for blocking negotiations is that the United

States is now actively developing a 'third generation' of nuclear weapons, which produce a powerful X-ray laser beam. There is no way that these weapons, which are a vital but little advertised part of the Star Wars programme (little advertised because President Reagan will keep saying that Star Wars is non-nuclear), can be developed without nuclear testing.

Publicly, US and British negotiators claim to be worried about the possibility of Soviet 'evasion' of a test ban by advanced technology, using only hard-to-detect low yield tests, if any. In fact, western nuclear technology is far more advanced in this area. According to a former British

nuclear weapons chief, there is not much western interest in high yield tests, anyway. It is in fact 'convenient for weapons design reasons to test in the range of 5 to 15 kilotons', far below the present agreed limit of 150 kilotons.

Even if a lower test limit than 15 kilotons were agreed, there was 'no technical reason not to test below (even a) 2 kiloton yield'. And new techniques in use at Aldermaston, which include laser 'implosion' tests of hydrogen bomb fuel, could enable most aspects of nuclear weapons to be tested without using any explosion at all.

British scientists have advised ministers that they could safely agree a threshold of 15-20 kilotons 'without any difficulty'. Even a comprehensive test ban would carry few risks that British nuclear weapons would thereby become less reliable. The only real problem remaining is checking the reliability of the 'primary' trigger (see picture), which the scientists say is extremely fickle. Designing a plutonium 'primary' was repeatedly likened to preparing a soufflé.

Britain tests far fewer nuclear weapons than the US, USSR, or France, partly because the UK stockpile is so small anyway. One defence scientist said that the Defence Ministry may 'take the view that British stockpile is sufficiently small... can you afford to (spare weapons to) test them?' Even so, they would feel 'more comfortable if we let one or two off'.

Meanwhile, the USSR has since August announced a unilateral moratorium on nuclear weapons testing, and has invited the West to follow suit.



Army and police get CS gas 'dog sprays' . . .

BRITISH TROOPS and police have been trying out a new anti-personnel weapon, a CS liquid chemical spray. Similar to a small standard aerosol canister, the new spray can be used to direct CS liquid at close range into a target's face, eyes or mouth. The new sprays, which have been allocated the military code L9A1, were produced by military manufacturers Schermuly Pains Wessex Ltd about two years ago.

The L9A1 spray is stocked by the armed forces, the Ministry of Defence admitted this week. The L9A1 liquid spray has been developed from a similar, older gas spray, type L1A1, produced by Schermuly during the 1970s. The L1A1, according to Schermuly, can fire 50 two second bursts of CS gas before running dry.

The Defence Ministry claimed this

week that the L9A1 was really a dog deterrent aerosol used by soldiers in Northern Ireland in covert or other positions to deter dogs which may give away their positions. But the manufacturers say it is equally effective against human beings. 'You can imagine it is pretty painful to man as well as beast', they said.

Leyton Labour MP Harry Cohen this week tabled questions to the Home Office and Defence Ministry about when, how, and why the new canisters have been developed and produced; and when and if they might be issued for use by troops or police within Britain.

Cohen is particularly concerned to find out how it is supposed that senior officers could possibly hope to prevent the sprays being abused in the heat of battle. Unlike CS gas grenades, where the gas is intended to disperse over a wide area, liquid spray canisters can be used to inflict extremely high and damaging doses of gas to single individuals in conflict with troops or police during a riot.

Since the Tottenham riots, the Metropolitan police have been testing

the L9A1. Army supplies of the gas spray were seen being tested at their riot training centre at Lippettshill, Essex, in October 1985. Scotland Yard's press office claimed this week, however, that 'we don't have any — we don't stock it'. At least, not yet.

. . . while USAF have riot gas grenades?

TROOPS AT AMERICAN BASES in Britain may also be equipped with gas grenades, according to documents recently taken from the US Air Force ammunition dump at Welford, Berkshire, by women from Greenham Common peace camp.

The documents include explosives authorisation forms, specifying the types of arms and ammunition which may be held in each building and bunker. Included in a list, marked 'RAF Form 1004', are 'M52A2 riot grenades', of which some 3,456 can be

held. The authorisation, taken from Building 487 at the USAF base, is dated 5 November 1985.

Confirmation of US plans to combat unruly Britons is contained in another US Air Force document obtained by the *New Statesman*, the Exercise Handbook of the 20th Tactical Fighter Wing, based at Upper Heyford, Oxon. The Handbook describes so-called 'Salty Nation' exercises, which are held regularly to 'enhance the wing's capability to transition from peacetime to wartime'. The 'areas to be exercised' in these exercises include, apart from nuclear and chemical attack, 'infiltration and sabotage', 'riots and demonstrations'.

Despite the documents removed from Welford, Colonel Douglas Kennett, public relations officer for the Third Air Force, claimed this week that 'We don't have [M52A2 riot grenades] at Welford. We've checked with our guys there . . . it's a US Army designation. We don't stock it at all in the USAF'.

Duncan Campbell and Patrick Forbes