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ARMS CONTROL IN THE 1990s

by

Trevor Findlay



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BIOGRAPHICAL NOTE

Trevor Findlay is a Senior Research Fellow at the Peace Research Centre. From 1986 to 1988 he was the first Foreign Affairs Disarmament Fellow appointed to the Centre by the Department of Foreign Affairs and Trade. From 1974 to 1986 he was an officer of the Australian Foreign Service, serving in Tokyo, Mexico City and Geneva. At Geneva he was a member of the Australian delegation to the Conference on Disarmament and other disarmament meetings, including the Disarmament Commission, the First Committee of the UN General Assembly and the Second Special Session on Disarmament. He is the editor of *Verifying A Test Ban*, Peace Research Centre Monograph No.4, Canberra 1989 and the author of *Nuclear Dynamite*, scheduled for publication in 1989. He is also editor of the Peace Research Centre's quarterly periodical *Pacific Research*.

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ABSTRACT

Growing political rapprochement between the United States and the Soviet Union and economic pressures on both superpowers and their allies are producing a new round of arms control negotiations and agreements. Verification techniques are being revolutionised, so-called confidence-building measures are being attempted on an impressive scale and a greater transparency and a less offense-oriented outlook is beginning to permeate military establishments. This working paper extrapolates these trends into the 1990s and examines the prognosis for a wide variety of items on the arms control and disarmament agenda - including nuclear, chemical and conventional weapons - in the last decade of the twentieth century. This paper is to be published as a chapter in Coral Bell, *Agenda for the Nineties*, Canberra Studies in World Affairs, Department of International Relations, Australian National University, Canberra.

Phoenix-like, arms control has arisen from the ashes of the first Reagan Administration to occupy once more a prominent place in relations between the superpowers.¹ It is likely to continue to do so into the 1990s - barring misadventure. This is partly because the need for arms control is now more solidly rooted in the international and domestic imperatives of the superpowers than it has been previously. Allied with this is a growing and probably irreversible scepticism about the utility of nuclear weapons. In addition, while having to face ever more complex technological challenges, arms control itself is able to draw on an increasingly potent array of technologies to verify compliance and thereby increase confidence in the arms control process. Benefitting from the lessons of the 1960s and 1970s, arms control agreements are also better drafted. Finally, since the dark years of arms control - the late Carter and early Reagan administrations - a quiet revolution has occurred in the area of so-called 'confidence-building measures' which may help shield future arms control endeavours from accidental buffeting.

Yet the very success of arms control between the superpowers will confront the 1990s with new problems: the dilemma of 'minimum deterrence' (how deeply can nuclear arsenals be cut before stability is affected?); the involvement of the lesser nuclear weapon states in nuclear disarmament; the task of convincing the new medium-sized military powers such as India and Brazil to cooperate in arms control efforts; and the proliferation of new weapons technologies to the developing world.

In August 1985 the Australian National University held a conference on the future of arms control. The prognosis was universally grim. Arms control had become a victim of the wider strategic competition between the United States and the Soviet Union. It had proved unable to shoulder the weight of East-West relations loaded onto it during the Kissinger/Nixon years. Afghanistan, Star Wars, KAL007, the SS20, were all markers on the road to arms control's demise. By 1983 the negotiating process was stultified. The bilateral talks on intermediate and strategic nuclear weapons and space arms had been suspended after a Soviet walkout, there was no agreed date for resumption of the atrophying Mutual and Balanced Force Reduction (MBFR) talks and the multilateral negotiating body, the 40-nation Conference on Disarmament (CD), was making progress on none of its many agenda

¹ The author would like to thank Andrew Mack and Mary-Lou Hickey for their comments on this chapter.

items, the most important being chemical weapons.

Only the Conference on Security and Cooperation in Europe (CSCE) survived this frigid environment, producing the 1986 Stockholm Conference on Confidence- and Security-Building Measures and Disarmament in Europe. It was at this conference, described by one participant as 'the only game in town'², that the first signal was given that dramatic change was pending. In August 1986 the Soviet Union for the first time in an arms control agreement accepted challenge on-site inspection, with no right of refusal. This was the clearest concrete evidence to that time that the new General Secretary of the Soviet Union, Mikhail Gorbachev, was intent on overturning Soviet arms control policy.

Gorbachev has since unveiled a series of arms control initiatives that have stunned the West and convinced the most hardened sceptics, among them British Prime Minister Thatcher, that he is someone the West 'can do business with'. Soviet actions have included the conclusion and smooth implementation to date of the Intermediate Nuclear Forces (INF) agreement; the unilateral withdrawal from Eastern Europe of troops, tanks and provocative military materiel such as bridging equipment; agreement to 24-hours notice on-site inspection for verifying a chemical weapons ban; greater transparency in military matters, including the Soviet defence budget; and willingness to halve the Soviet Union's 'heavy' ICBMs under a START treaty.

The result is a rash of arms control negotiations the likes of which have not been seen since the Carter Administration. In the strategic nuclear field the START negotiations, which made substantial progress under President Reagan, have resumed following the Bush Administration's review of US security policy. The two sides have also resumed talks on space arms and nuclear testing. In Europe there are two major sets of negotiations taking place in Vienna. The first are the Conventional Forces in Europe talks (CFE) which aim to reduce and equalize the conventional forces of the Warsaw Pact and NATO from the Atlantic to the Urals. These talks, stimulated by unilateral withdrawals and bold opening gambits from both sides, promise a revolution in European security. Simultaneously the 35 CSCE

² C.A. Namiesniowski, 'The Stockholm Agreement: An Exercise in Confidence Building', *Background Paper No.14*, Canadian Institute for International Peace and Security, September 1987, p.3.

nations (including the European nonaligned and neutrals) are meeting in Vienna to improve and extend the confidence-building measures contained in the 1986 Stockholm Agreement. Almost unnoticed, the two superpowers have also extended their bilateral confidence-building measures by establishing Nuclear Risk Reduction Centres in their capitals, upgrading the Moscow/Washington 'hotline' and negotiating what is in effect an extension of the 1972 Incidents at Sea Agreement to cover land and air forces. Finally, the Conference on Disarmament in Geneva is at last making marked, if uneven, progress in its negotiations on a comprehensive chemical weapons convention (CWC).

The 1990s are likely to see agreements reached in most of these negotiations and moves towards deepening and extending the arms control process generally. The grounds for optimism are varied.

First, in contrast to early arms control 'booms', the current rash of arms controlling springs from deep international and domestic imperatives, not just on the part of the Soviet Union but also of the United States. The first period of arms controlling, that of the early 1960s, was arguably driven as much by fear as anything else. The major agreement of the period, the 1963 Partial Test Ban Treaty, can be seen as a direct outcome of the 1962 Cuban missile crisis, as was the 1967 Treaty of Tlatelolco which created the Latin American Nuclear-Free Zone. The 1968 Nuclear Nonproliferation Treaty was also a product of fear - that of the so-called 'nth' nuclear state and the dangers of a proliferating world.

The Nixon/Kissinger/Brezhnev era of arms control on the other hand could be interpreted as a piece of old-fashioned power balancing, a product of a mutual recognition that the two superpowers had achieved approximate nuclear parity and that this could be 'managed' through arms control. Arms control was a political device, imposed from above, in an attempt to quarantine the arms race from other aspects of the US/Soviet relationship. Paradoxically it came to symbolize the state of the entire relationship and accordingly collapsed along with the rest of detente.

The current round of arms control has deeper wellsprings. The most obvious is economics. Both the Soviet Union and the United States find themselves in economic distress partly as a result of their mutual arms racing. What the Soviets have done by depriving their people of consumer goods, the United States has done by mortgaging its economic future through budget

deficits and borrowing. Besides the reality of its huge foreign debt, a further incentive for the United States to cut back its military spending is the economic competition represented by Japan, a united Europe and a thriving Asia/Pacific region. US public opinion polls indicate that defence ranks very low among the concerns of ordinary Americans compared with economic issues, while increased defence spending is barely more popular than foreign aid.³ These considerations - quite apart from the 'Gorby factor' - are propelling the United States toward unilateral cuts in its military spending.

Likewise for the Soviets, fundamental restructuring of their economy demands severe cut-backs in military spending whether these are achieved through negotiations or not. Hence the recently announced 14% cut in the Soviet military budget. A few statistics, revealed by Prime Minister Nikolai Ryzhkov, indicate the enormity of the malaise. The Soviet Union currently runs a budget deficit of 100 billion roubles (equivalent to \$A215 billion) or 12% of its gross national product.⁴ Its share of world trade is a mere 4%. In 1989 three quarters of the Soviet Union's hard currency income will be used to service its growing national debt of \$A67 billion. Perhaps more frighteningly, 40 million Soviet citizens are living below the poverty line. Soviet factories annually spew 100 million tonnes of waste products into the air and 40% of the industrial plant is worn out and obsolete. These economic imperatives are the strongest evidence for the case that whoever is in charge of the Soviet Union will be forced to pursue arms control.

Initially the United States does not stand to gain as much in economic savings from arms control as the Soviet Union, since nuclear weapons are relatively cheap, verification is expensive and the first round of conventional force cuts (in Europe) will be overwhelmingly borne by the Soviets. However the United States will achieve substantial savings from further reductions in its European deployments.

Apart from the economic imperatives, the political wellsprings of the current round of arms controlling run deeper. Whereas in the Nixon/Kissinger era arms control was based on a

³ David White, 'The Music Fades At The Pentagon', *The Canberra Times*, 23 July 1989.

⁴ Rupert Cornwell, 'Soviet Economy Dead on Arrival, Not Ailing', *The Sydney Morning Herald*, 15 July 1989.

detente that tended to leave some areas of competition, particularly regional conflicts, relatively unfettered, today a more comprehensive detente is developing. The Soviet Union's arms control concessions have taken place against a much wider Soviet peacemaking process which has included withdrawal from Afghanistan, cuts in Soviet forces in Mongolia and along the Sino-Soviet border, territorial concessions to China, assistance with peace efforts in Namibia, pressure on Vietnam to withdraw from Cambodia, reduced support for the Sandinistas in Nicaragua, acquiescence in the liberalisation and pluralisation of Poland and Hungary and the repayment of the Soviet debt to the United Nations. This wider canvas of Soviet behaviour is producing a much more fundamental change in international relations than occurred in the Nixon/Brezhnev years.

A second factor favouring arms control in the 1990s is a growing disenchantment in both East and West with nuclear weapons and nuclear deterrence. Nuclear weapons technology is old and no longer challenging. Science has moved on to other pursuits such as superconductivity, cold fusion and the search for anti-matter. In the United States, the coterie of nuclear weapons scientists at the Livermore and Los Alamos laboratories is shrinking, the funding for nuclear weapon tests increasingly stretched. While in the 1960s and early 1970s nuclear weapons designers had ready access to the President and Cabinet, through the Atomic Energy Commission (AEC) and the Joint Committee on Atomic Energy (JCAE), as well as through personal contacts, this is no longer the case. Both the AEC and the JCAE are long gone and the Department of Energy, with responsibilities for energy policy writ large, has relegated nuclear energy to the level of Assistant Secretary, three levels below Cabinet. John Mueller goes so far as to argue that 'the nuclear arms competition may eventually come under control not so much out of conscious design as out of atrophy born of boredom'.⁵

Even the armed services are de-emphasising nuclear weapons. The US Navy, never particularly enamoured of them, plans to retire three types of short-range nuclear weapons currently deployed on its submarines and surface ships. Such weapons - ASCOCS, SUBROCS and Terriers - were designed and deployed in the 1950s and 1960s to fight a nuclear war at sea. As US Vice Admiral Mustin has noted, 'the concept of a nuclear war at sea is

⁵ John Mueller, 'The Irrelevance of Nuclear Weapons', *International Security*, Vol.13, No.2, Fall 1988, p.56.

a concept whose time has passed'.⁶ Even on land, the US army has been keen to remove from Europe those systems, such as nuclear mines, which are no longer regarded as appropriate to theatre operations.

According to former head of the Lawrence Livermore National Laboratory, Herb York, these developments are no accident, but result from a growing scepticism about the ability of nuclear weapons to solve national security problems.⁷ President Reagan's awakening to the reality of American vulnerability to nuclear attack, the challenge to nuclear deterrence implicit in his Strategic Defense Initiative and his agreement with Gorbachev that 'a nuclear war can never be won and must never be fought' are notable elements in this development. Increasing numbers of academic critiques of nuclear deterrence theory,⁸ as well as the vitality of the peace movements of the early to mid-1980s, have also undoubtedly helped change the assumptions of Western public opinion about nuclear weapons. The nuclear winter theory must also be credited with alerting world opinion to the fact that nuclear war, if ever it was a zero sum game between nuclear antagonists, can no longer be considered as such.

Internationally, the gloss has gone off the acquisition of nuclear weapons for all but a few: those on the threshold of proliferating, such as Pakistan; the pariah states like Israel and South Africa; and the radical fringe like Libya, Iran and Iraq (whose nuclear capabilities are in any case low). Brazil and Argentina seem to have abandoned their nuclear weapon aspirations. The Nuclear Nonproliferation Treaty (NPT) now has 137 adherents,⁹ bringing the nonproliferation norm close to universality among non-nuclear weapon states and making the likelihood of the NPT's renewal in 1995 very high. In the 1990s

⁶ *Pacific Research*, Vol.2, No.2, May 1989, p.13.

⁷ From a presentation by Herb York to the Institute for Global Conflict and Cooperation (IGCC) Summer Seminar, University of California, Irvine, 3 July 1989.

⁸ See for instance Jonathan Schell, *The Fate of the Earth*, Picador, London, 1982; Robert S. McNamara, *Blundering Into Disaster*, Pantheon Books, New York, 1987; Robert Jervis, *The Illogic of American Nuclear Strategy*, Cornell University Press, Ithaca, 1984.

⁹ *Newsbrief*, Programme for Promoting Nuclear Non-Proliferation, No.5, April 1989, p.3.

only Pakistan is likely to join the ranks of the nuclear-weapon capable states.

Another reason why the arms control process is likely to endure into the 1990s is that in-principle disagreements over intrusive verification have been overcome and the success of techniques like on-site inspection (OSI) demonstrated. Early arms control agreements such as the Partial Test Ban Treaty and the SALT agreements were made possible only by non-intrusive verification or so-called National Technical Means - in particular aircraft and satellite surveillance. By the mid-1970s all the 'easy' arms control agreements verifiable by such means (or those judged to require no verification, such as the Biological Weapons Convention and the Environmental Modification Convention) had been done.¹⁰

In the 1980s the Reagan Administration's campaign against alleged Soviet non-compliance with existing arms control agreements, transmuted in his second term into the slogan 'trust but verify', has meant above all a requirement for on-site inspection provisions in new agreements (even where this may not be strictly necessary).¹¹ Gorbachev's agreement to wide-ranging on-site inspection and other intrusive measures has removed a barrier to arms control dating back to the collapse of negotiations on a comprehensive test ban treaty in the late 1950s.

The 1986 Stockholm Agreement and the 1987 INF Agreement were the first of the new generation of arms control treaties. START will employ similar verification techniques, as will the European conventional arms control agreements and the new chemical weapons convention. Paradoxically the Americans, having been caught off guard by the new Soviet reasonableness over intrusive verification, have qualified their earlier over-enthusiasm, citing both constitutional and security considerations for opposing particular types of on-site inspection, including that of strategic bomber bases and cruise missiles under START.

¹⁰ There were some exceptions such as the 1968 NPT, which has an elaborate cooperative on-site inspection regime, and the 1976 Peaceful Nuclear Explosions Treaty, which provided for mutual on-site inspection of peaceful nuclear explosions.

¹¹ A case in point is the re-negotiated verification provisions for the 1974 Threshold Test Ban Treaty.

A final reason why the prognosis for arms control in the 1990s is good is the existence of a new structure of confidence- and security-building measures that has not previously existed. While this will not prevent any deep-seated conflict between the superpowers, it may help avoid some of the incidents and crises that have previously dogged arms control negotiations, such as the shooting of a US military officer in East Germany, the downing of the Korean airliner, the lack of notification given after the Chernobyl disaster and the large Soviet manoeuvre conducted during the Polish crisis over Solidarity. A growing web of CBMs now envelops relations between the superpowers and their allies including those deriving from the 1986 Stockholm Agreement; the air traffic agreement between Japan, the Soviet Union and the United States covering the North-West Pacific; the recent prevention of war agreement relating to military activities on land and air; and the International Atomic Energy Agency's agreements on notification of nuclear accidents. These formal CBMs will be buttressed by growing **glasnost** in the Soviet Union, widening links between the US and Soviet military hierarchies and greater openness resulting from the verification of formal arms control agreements such as INF, START, CFE and the CWC.

What then are the prospects for specific areas of arms control as we enter the 1990s?

Strategic Nuclear Arms Reductions

Negotiations on a START agreement on strategic nuclear arms reductions, which began in 1985, made substantial progress under the Reagan Administration. General agreement was reached on a 50% reduction in deployed strategic forces (although the number actually cut will be more like 30% because of generous counting rules for strategic bombers armed with gravity bombs) to a ceiling of 6000 warheads on 1600 strategic delivery vehicles. Sublimits of 4900 will apply to ballistic missile warheads and 1540 to warheads on 154 heavy missiles. There has also been agreement on a 50% reduction in the throw-weight for Soviet ballistic missiles to equal ceilings for both sides. Finally there has been agreement on the outlines of a verification regime, including several kinds of on-site inspection, data exchange and measures to reduce the possibility of cheating.¹²

¹² *Arms Control Update*, No.10, December 1988, p.1.

Major areas of disagreement remain to be resolved by the Bush Administration. Washington has already announced a change of policy on mobile ICBMs, which will help resolve that issue. While the Reagan Administration wished to ban mobile ICBMs to enhance verification of a START agreement, the Bush Administration favours mobiles as a means of enhancing the stability of deterrence. Other problems facing the negotiators include limits on sea-launched cruise missiles, counting rules for strategic bombers carrying air-launched cruise missiles, sublimits on ICBM warheads, modernisation of heavy ICBMs, and Soviet linkage of START to limitations on strategic defence testing and deployment.

Space and Strategic Defence

While the United States seeks to protect the option of deploying a strategic defence system in the future, the Soviet Union wants an indefinite continuation of the 1972 ABM Treaty which currently bans such deployments. The US wants the two sides to adhere to the treaty for a yet-to-be specified period of time, while continuing research on ballistic missile defence as each side sees fit.¹³ No later than three years before the end of this period the two sides would hold intensive discussions on strategic stability, after which each would be free to deploy strategic defences. By contrast, the Soviets propose continued adherence to the ABM Treaty for a 10-year period, with both sides permitted to work on the types of ballistic missile defence currently allowed by the Treaty (which itself is a contested issue). The Soviets have explicitly linked the conclusion of a START agreement to agreement on limiting testing and deployment of space-based missile defences. For its part the United States has said it will not sign a START agreement until the Soviet Union 'corrects' its violation of the ABM Treaty by dismantling the large phased-array radar under construction at Krasnoyarsk. The Soviets have offered to dismantle the radar if the US agrees to abide by the 'narrow' traditional interpretation of the ABM Treaty.

A START agreement is likely to bring greater strategic stability to the 1990s, particularly if the Soviets reduce the numbers of 'heavy' ICBMs as envisaged and if mobile ICBMs are

¹³ Stephen A. Hildreth, 'Arms Control: Negotiations to Limit Defense and Space Weapons', US Congressional Research Brief, 10 April 1989, p.2.

permitted. While the planned US nuclear modernisation program will largely be permitted to proceed under START, it will be at lower levels. Overall START is likely to reduce each superpower's incentive to launch a nuclear first strike against the other. The SDI question will be fudged and both sides will continue vigorous research into strategic defence, although in both cases with less extravagant funding and in the US case with a much lower profile. 'Star Wars' is in fact likely to revert to the series of piecemeal and disparate research programs that preceded President Reagan's March 1983 speech.

START II?

The key question is whether the 1990s will see START II. Critical issues that will need to be addressed are: the level to which nuclear forces can be reduced before stability is threatened; and the point at which the lesser nuclear weapon states should become involved in the process. On the first question, Schelling and Halperin noted as far back as the early 1960s that the **level** of forces on both sides is an important determinant of the stability of the nuclear balance.¹⁴ The criteria on which minimum deterrent forces should logically be based are:

- 1) that each side's forces be invulnerable to a first strike
- 2) that each have enough to guarantee a devastating second strike
- 3) that verification be sufficiently potent to detect any attempt at 'breakout'.

Former US Secretary of Defense Robert McNamara has suggested up to 500 strategic warheads per side as being sufficient.¹⁵ Desmond Ball has suggested a possible 1750 per side, although he stresses that the actual number is less important than the characteristics of the residual weapons, the basing modes, employment strategies, and other factors such as the profile of the lesser nuclear powers.¹⁶

Any deep reductions will eventually require the

¹⁴ Thomas Schelling and Morton Halperin, *Strategy and Arms Control*, Pergamon-Brassey's, New York, 1985, pp.56-58.

¹⁵ McNamara, p.123.

¹⁶ From speaking notes by Des Ball on 'Radical But Feasible Reductions', January 1988.

participation of China, France, the United Kingdom and Israel. While the UK is likely to be willing to participate, the same cannot be reasonably said of the others, despite the fact that China and France have declared their intention to join the nuclear disarmament process once the two superpowers have made substantial cuts (the former has specified 50%). It is unclear at this stage whether these states would press for parity with the superpowers or (less likely) be prepared to accept proportional cuts. Applying the criteria for a minimum deterrent to these lesser nuclear powers would logically require equal forces with the superpowers. Nuclear weapons have become such potent symbols of superpower political hegemony however that they are unlikely to readily accept equality.

A further complication for START II in the 1990s will be the continuing debate over strategic defence. There appears to be a widespread expectation that START I will gloss over the SDI problem, deferring any decision on the deployment of strategic defences to the mid- to late-1990s. Any deployment of strategic defences will need to be factored into the minimum deterrent equation, since not only can such defences decrease vulnerability and thereby instability if deployed asymmetrically, but they can, at least in theory, be used offensively, especially against space assets such as communications and reconnaissance satellites.

This raises another issue for the 1990s - that of the vulnerability of the space-based systems on which stable deterrence depends. To date the United States has resisted Soviet demands for a treaty banning ASATs, apparently on the grounds that it may wish to use its presumed superior ASAT capability to attack Soviet satellites prior to or during war. This is the same logic that helped produce the MIRV and cruise missile complications that now afflict arms control efforts. As more and more nations come to rely on space assets for defence purposes the US will come under increasing pressure to change its attitude. It is already in a minority of one in UN votes on the subject. An ASAT treaty would appear to be an essential part of any comprehensive nuclear arms control regime in the 1990s.

START II will also need to address whether particular nuclear weapon systems should be banned altogether in the interests of stability. For instance fixed-site, multiple warhead, land-based ballistic missiles might be axed in favour of concealable or mobile cruise missiles. The very characteristics that make such systems less vulnerable however also make them more problematic for arms control verification. Alternatively

all land-based weapons could be banned in favour of the other two legs of the triad - strategic bombers and SLBMs.

Non-Strategic Nuclear Weapons

With the removal by the INF Agreement of Soviet and American intermediate and shorter-range ballistic missiles and ground-launched cruise missiles worldwide, the obvious next targets for arms control are the short-range theatre and tactical systems (some would argue that since these systems lower the nuclear threshold more than INF that they should have been removed first). If the drift of public opinion in Europe continues, it is clear that these systems will be removed from the Continent by the superpowers in the early 1990s on the coattails of major conventional force cuts. As Alan Sweedler puts it, 'once a conventional forces agreement is in place, the political pressure for reduction, if not elimination, of tactical nuclear weapons from Europe will be almost irresistible'.¹⁷ NATO has already committed itself to negotiations on short-range nuclear forces (SNF) once a CFE agreement has been reached. The case of the French SNF is more problematic, but since these would land on Germany if ever used in war, there will be compelling reasons for the Federal Republic to pressure the French to divest themselves of these systems.

Non-strategic naval nuclear forces have so far been immune from arms control, although there have been unilateral moves towards denuclearisation. The sea-launched cruise missile (SLCM) remains the greatest problem. Low-flying, 'stealthy', relatively slow but accurate, these weapons are clearly still valued by military planners for 'surgical' strikes on land. From an arms control perspective they are dangerous because of their potential numerical proliferation, their lack of detectability by radar, their warhead interchangeability (conventional and nuclear) and their increasing sophistication. As John Lamb points out, future generations of these weapons 'could be supersonic, have an intercontinental range and be even more "stealthy"'.¹⁸ Former

¹⁷ Alan Sweedler, 'Prospects for Conventional Arms Control In Europe', paper presented to the IGCC Summer Seminar, University of California, Irvine, 1 July 1989, p.10.

¹⁸ John Lamb, 'Testing the Advanced Cruise Missile: Starting Down the Slippery Slope', *Arms Control Communique* No.60, Canadian Centre for Arms Control and Disarmament, 2 February 1989.

US arms control negotiator Paul Nitze has already called for a global ban on sea-launched cruise missiles.

It is difficult to see how the US navy (and indeed the Soviet navy, whose true position on arms control has never been tested in negotiations) can hold out against arms control efforts in the 1990s. Chief US negotiator at the CFE talks, Stephen Ledogar, while describing the current negotiations as 'saltwater-free', has conceded that there might be negotiations on naval forces 'sometime, somewhere'.¹⁹ Chief military adviser to President Gorbachev, Sergei Akhromeyev, has told the US House Armed Services Committee that the Soviet Union regards the commencement of naval arms reduction talks as 'a major prerequisite for further improvement of Soviet-American relations'.²⁰

Nuclear Test Ban

One means of ensuring that new generations of nuclear systems, such as the advanced cruise missile, are not deployed, would be a comprehensive test ban treaty. Yet, despite all the political symbolism with which such a measure has been invested and despite convincing evidence of seismologists and others that a CTB is verifiable within an acceptable margin of safety, a CTB is the one arms control measure not likely to see the light of day in the 1990s. The current bilateral talks on nuclear testing may produce a lowering of the testing threshold below 150 kilotons and even a quota system for tests. However the United States demonstrably has engaged in these talks as a means of heading off a test ban, not of achieving it.²¹

¹⁹ United States Information Agency (USIA) report, 'Progress at Conventional Arms Talks: US Negotiator', 24 July 1989.

²⁰ *The Canberra Times*, 23 July 1989.

²¹ Frank Gaffney, former US Assistant Secretary for Defense has said: 'The thinking goes like this: the more time is wasted on discussions and experimentation of monitoring techniques irrelevant to the verification of an environment in which there are no legal tests, the easier it will be to stave off demands for [a] comprehensive test ban'. (Quoted in *Geneva Monitor*, No.2, 5 April 1989.) The ploy had already been revealed by White House officials in an interview with *Scientific American* in October 1988 (see *Pacific Research*, Vol.2, No.1, February 1989).

After all the arguments about verifiability, reliability testing and the need for new weapons systems have been stripped away, the bottom line is that those involved in maintaining nuclear deterrence believe that testing will always be necessary as long as nuclear weapons exist. Beyond that, the argument runs, even if tests are not necessary for maintaining the viability of the weapons themselves, they are necessary for maintaining the viability of the nuclear weapons laboratories in order to guard against a so-called 'breakout' of new nuclear weapon testing and development. Ironically, the more arms control succeeds in lowering the levels of nuclear weapon arsenals, the more compelling this argument becomes. Only with the complete abolition of nuclear weapons does a CTB logically fit into this schema.

Seismologist Jack Evernden eloquently points up the dilemma all leaders confront in daring to agree to a CTB:

An explanation, a simple one, for all of this irrationality has become apparent to me after years of contending with these issues. And it has nothing to do with one or all governments consciously harbouring evil intent. No, the situation is far more dangerous than that. It's simply that when most men, whether liberal Democrat, conservative Republican or Soviet Communist, come to ultimate governmental authority, they are of no better stuff than you and I, and they are oft-overwhelmed by the responsibility and complexity of political decision, particularly when such decision must be made on the basis of scientific data that they totally fail to comprehend; data which are multidimensional and highly sophisticated and about which someone with a hidden agenda will always argue there is a dangerous margin of interpretation and possible uncertainty.

When faced with being accountable through the ages to come for the safety of their respective countries during their few years of tenureship, should a President or Premier take the route of the untried, or should he follow the oft-tried and oft-failed, but

always defensible and always strongly felt, route of the mailed fist? He is certain that no one can accuse him of weakness. That such conduct actually is a sign of a much more profound weakness is a point too subtle for his anxious mind to comprehend.²²

While this observation could be applied to arms control in general, it has particular potency in relation to a CTB because of the element of finality about such a measure.

In other respects too, a CTB is a measure whose time may have passed. Israel has proved that a non-nuclear weapon state can amass a nuclear arsenal without testing. Whether these weapons will function properly is another question, but since nuclear weapons, because of their destructiveness, only require a small degree of credibility to be an effective deterrent, the benefits of a CTB in halting nuclear proliferation could be said to have greatly lessened. While not all non-nuclear weapon states have as sophisticated a scientific capability as Israel, nevertheless the threshold of nuclear weapon capability once represented by the carrying out of a nuclear test has been considerably lowered.

Conventional Arms Control

It is increasingly clear that the 1990s will see a fundamental reordering of the politico-military order in Europe as a result of dramatic cuts in conventional military forces in that most heavily armed region of the world. The Soviet Union has at last indicated that it is prepared to accept asymmetrical cuts in its armed forces stationed in Europe, in return for relatively modest NATO cuts. Just as important, the Soviets have provided relatively detailed data on their existing forces and promised a restructuring of their forces along more defensive lines. Indeed, by contrast with the 1980s where such discussion has been confined largely to academic circles in Western Europe, the 1990s are likely to see increasing focus worldwide on 'non-offensive defence' or 'defensive defence'.

The current proposals of NATO and the Warsaw Pact at the CFE talks are remarkably compatible, while the talks themselves have

²² Quoted in William E. Burrows, *Deep Black*, Berkley Books, New York, 1988, p.335.

been described by US Ambassador Ledogar as 'breathtaking in the rapidity of their progress'.²³ Assuming the remaining differences can be overcome (and experts such as Alan Sweedler and Jonathan Dean believe they will), then Europe at the beginning of the new decade is likely to see vastly reduced and equal levels of NATO and Warsaw Pact forces, including: tanks, artillery, armoured vehicles and helicopters. While current Soviet and NATO proposals on troops and aircraft differ substantially, there is again the likelihood of massive cuts based on a compromise. The current US position would require the Soviets to reduce their troop levels in Eastern Europe by 325,000 or 46% of current levels, while the US would remove only 30,000, a 10% decrease. The Soviet proposal calls for an overall **alliance** limit of 1.35 million troops for each side. This would be more favourable to the Soviets since their troops make up a much larger proportion of Warsaw Pact forces than the Americans do in NATO. In the area of aircraft a problem exists because many NATO aircraft are multipurpose, while a substantial proportion of Warsaw Pact aircraft are interceptors. The Soviets want to concentrate on removing strike aircraft, while US proposals for a common aircraft ceiling threaten to remove larger numbers of Soviet interceptors.²⁴

While President Bush has called for a CFE agreement before 1990, the Soviets - with by far the greatest number of weapons slated for removal and destruction - are sceptical that the implementation of such a treaty could be completed before 1996 or 1997. The Soviets are also concerned about absorbing the 325,000 troops likely to be withdrawn from Eastern Europe under CFE. These difficulties may in turn jeopardize the timetable for talks on SNF in Europe.

Nonetheless, the pressures on both the United States and the Soviet Union to reduce their forces beyond an initial CFE agreement, this time symmetrically, are likely to swell in the 1990s. The United States for its part will only start to gain economically from deep cuts beyond the first round of CFE. (A unilateral withdrawal of the 46,100 US troops currently stationed in South Korea - an increasingly likely event in the 1990s - will

²³ USIA report, 'Progress at Conventional Arms Talks: US Negotiator', 24 July 1989.

²⁴ This analysis is drawn largely from the paper by Alan Sweedler.

yield similar economic benefits.)²⁵ General Galvin, Supreme Allied Commander in Europe, has revealed that NATO is already studying options for 'follow-on' conventional arms reductions.²⁶

So dire are the economic straits of the Soviet Union that it may actually be forced to outrun arms control by withdrawing more of its forces (mothballing rather than destroying the weaponry) than a CFE obliges it to. Such tendencies will be encouraged by additional confidence-building measures arising out of the CSBM talks in Vienna, the unilateral restructuring of Soviet forces along more defensive lines, such as the removal from Europe of bridging equipment and pre-positioned supplies, and the conclusion of a chemical weapons convention.

Conventional Arms Transfers

While the total trade in conventional arms has dropped since 1984 (most of which can be explained by poor economic conditions in developing countries), there would appear to be little chance of a comprehensive conventional arms transfer arrangement in the 1990s. As Keith Krause explains, 'second- and third-tier suppliers would especially have to sacrifice important national goals (such as an independent, high-technology, defence industry) in order to accept restraints on their arms trade'.²⁷

What may be hoped for however is increasing superpower cooperation in controlling the dissemination of high technology for military purposes, as in the case of ballistic missile and chemical weapon technology. In addition the winding down of several regional conflicts, such as in Southern Africa, Indochina and Iran-Iraq, combined with continuing economic hardship in the Third World, may lead to much lower levels of arms exports to the countries involved. This will affect at least half of the 1980s' top ten arms recipients: Iraq, Iran, Cuba, Vietnam and the Soviet Union.²⁸ The Soviets, in winding down their own

²⁵ Richard Halloran, 'US Considers The Once Unthinkable on Korea', *New York Times*, 13 July 1989.

²⁶ *The Times* (London), 13 July 1989.

²⁷ Keith Krause, 'The International Trade in Arms', *Background Paper No.28*, Canadian Institute for International Peace and Security, March 1989, p.7.

²⁸ *Ibid.*, p.2.

military-industrial complex, may in fact contribute more to a decline in arms transfers than any other factor. If market forces are allowed to prevail, their arms will be more expensive and less abundant. An indebted Soviet Union is also less able to sustain military aid to former recipients like Vietnam, Nicaragua and Cuba, and generous terms to countries like India.

This optimistic view could of course all come unstuck if a new series of regional conflicts were to erupt. In addition the newly industrializing countries, particularly in the Asia/Pacific region, and the OPEC countries if oil prices again rise, are likely to have increasing funds for substantial arms purchases.

Chemical Weapons

A standing joke at the Conference on Disarmament (CD) is that a chemical weapons convention will forever be ready in two years.²⁹ Given the magnitude of the global civilian chemical industry, the scale of the verification task facing a CWC dwarfs anything tackled under the IAEA or the INF/START treaties. However recent developments, largely in Soviet policy but also in French and Western policy generally, augur well for the conclusion of a comprehensive, verifiable ban on chemical weapons acquisition and use by the early 1990s.

The Soviets, for their part, have finally agreed to on-site inspection on challenge. They have also for the first time admitted possession of CW, hosted an international tour of a CW plant in the Soviet Union and provided an estimate (albeit one disputed by Western experts) of Soviet chemical stocks. Most recently they have agreed bilaterally with the United States on a timetable for destruction of existing stocks and on details of

²⁹ Former Australian Ambassador to the CD, Richard Butler, has predicted that a CW convention will be ready before the end of the Bush Administration's first term (*Pacific Research*, Vol.2, No.2, May 1989, p.9); former US Ambassador to the CD, Charles Flowerree says most observers estimate two years (*Armed Forces* (UK), August 1988, p.354); while CW expert Julian Perry Robinson estimates another 2-3 years (*Pugwash Newsletter*, Vol.25, No.3, January 1988, p.123). Sergeui Batsanov, Soviet delegate to the CD, has recently predicted that the treaty will be ready within a year (UPI report, 12 July 1989).

OSI procedures.³⁰ On the US side, President Bush has personally committed himself to a successful conclusion of the CW negotiations, having presented the US draft treaty to the CD in 1984. The question of proliferation of chemical weapons capability has also been tackled vigorously since the acquisition and use of CW by Iraq in its war with Iran. This has been done multilaterally through export controls coordinated by the so-called Australia Group. Bilaterally, the United States has also put pressure on particular states, the Federal Republic of Germany and Switzerland most prominently, to prevent companies under their jurisdiction from assisting states in the Middle East (Egypt, Libya, Iraq, Syria and Iran) to acquire CW.

The CW issue highlights one of the challenges for arms control in the 1990s, namely how to persuade lesser powers to desist from acquiring weapons or technology likely to be controlled by international agreement and how to induce them to join the agreement once it has entered into force. In the case of CW the trick may be to offer sufficient incentives (besides the guaranteed forbearance of others in acquiring CW) to induce them to forebear. This may include offering assistance in the peaceful uses of chemicals, a guarantee of political influence in running the convention, such as through membership of the executive body, involvement in the verification regime and guaranteed assistance in the event of attack.

A related area requiring and likely to receive attention during the 1990s is the gaping verification loophole in the Biological Weapons Convention. With ever widening glasnost in the Soviet Union it is conceivable that the truth will finally be revealed about the 1979 outbreak of anthrax at Sverdlovsk and the alleged violation of the Convention either confirmed or refuted.³¹ This would pave the way for a fresh beginning, including the grafting of a CW-type verification system onto the BW convention.

³⁰ *The Canberra Times*, 19 July 1989.

³¹ This process has already begun unofficially through the contacts of Professor of Biochemistry and Molecular Biology at Harvard University, Matthew Meselson, with his Soviet counterparts (see *Pacific Research*, Vol.2, No.1, February 1989, pp.17-18).

Ballistic Missile Technology

The most obvious area besides CW where 'hold-out' states may be a problem is ballistic missile technology. Despite the existing Missile Technology Control Regime (MTCR) instituted among key Western states, at least 17 Third World states possess or are in the process of developing or procuring medium or short-range ballistic missiles.³² Several middle-ranking countries such as India, Argentina, Brazil and Pakistan are well advanced in developing their own capability. Others, especially in the Middle East, have imported and later modified, short and medium-range missiles.

Combined with nuclear and/or chemical weapons capability, ballistic missile technology can clearly be a destabilizing factor, enabling long-distance attacks or threats of attack not previously possible. The best that may be hoped for in this area is that the existing ballistic missile-capable countries can be drawn quickly into the MTCR and that its provisions be tightened. While this may help prevent further ballistic missile proliferation and choke off some existing capability (due to lack of spare parts and operating expertise), for the major countries of concern the cat regrettably is already out of the bag.

Confidence-Building Measures

In the 1990s the confidence-building regime in Europe will become more elaborate and sophisticated. Possibilities include:

- restrictions on and notification of mobilization
- annual exchanges of detailed data on military organization, location and introduction of major weapon systems and troops
- establishment of a 'random evaluation system' to assess exchanges of information
- direct communications on CBMs between military organizations rather than through diplomatic channels
- establishment of European risk reduction centres (modelled on the US/Soviet centres)
- inclusion of naval forces, particularly amphibious forces, in the CBM regime
- regular, organized exchange of views on military doctrine tied to actual force structures, capabilities and

³² Martin S. Navias, 'Ballistic Missile Proliferation in the Middle East', *Survival*, Vol.31, No.3, May/June 1989, p.226.

dispositions.

The 1990s may also see CBMs employed more extensively outside Europe. Currently the Contadora Plan for Central America contains a comprehensive set of CBMs for implementation as part of a general peace settlement. Another area where such a sub-regional scheme might be applicable would be Indochina following a settlement of the Cambodian problem. There are unlikely however to be CBM regimes as extensive as that in Europe established elsewhere without the settlement of regional conflicts. Such disputes currently preclude even the modicum of confidence necessary to negotiate such arrangements. In the North Pacific for instance the Korean conflict, the China-Taiwan standoff and the Northern Territories dispute stand in the way of a comprehensive CBM regime.

Verification

One area where dramatic progress may be expected in the 1990s is in the area of verification. Implementation of the INF and START agreements will provide unprecedented experience with a wide variety of types of on-site inspection. National Technical Means are also likely to become more powerful. Former CIA chief William Colby predicts 'constant visual surveillance of all areas of the globe despite weather, darkness, or camouflage' and 'instant translation of electrical messages and oral transmissions anywhere in the world'.³³ While deception is still possible, the growing intrusiveness, complexity and multiplicity of verification means, especially since the turnaround in Soviet policy on the issue, will vastly complicate the life of a potential violator.

Conclusion

In summary, the 1990s can look forward to deep cuts in strategic nuclear weapons, the removal of nuclear weapons from Europe, a fundamental lowering and restructuring of the conventional balance in Europe, a global ban on chemical weapons, better verification for the existing ban on biological weapons and increased use of confidence-building measures.

On the downside there is likely to be little progress in

³³ Burrows, p.296.

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containing the spread of military high technology to developing countries, especially ballistic missile and space technology and no comprehensive attack on the problem of conventional arms transfers.

Many of these trends could be upset of course by an unexpected fissure developing in international relations, perhaps involving the Soviet leadership, Eastern Europe, the Middle East or China. As John Lennon, the great exponent of 'giving peace a chance', once remarked: 'Life is what happens to you while you're busy making other plans'.

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