ARMS CONTROL AND DISARMAMENT
A SELECT ANNOTATED BIBLIOGRAPHY

DISSERTATION
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1994
TO

MY

LATE PARENTS

[Mrs. & Mr. MUZAFFAR - UL MULK]
<table>
<thead>
<tr>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENT</td>
</tr>
<tr>
<td>AIM, SCOPE AND METHODOLOGY</td>
</tr>
<tr>
<td><strong>PART ONE</strong></td>
</tr>
<tr>
<td>INTRODUCTION</td>
</tr>
<tr>
<td>ARMS CONTROL</td>
</tr>
<tr>
<td>DISARMAMENT</td>
</tr>
<tr>
<td>CONCLUSION</td>
</tr>
<tr>
<td><strong>PART TWO</strong></td>
</tr>
<tr>
<td>ANNOTATED BIBLIOGRAPHY</td>
</tr>
<tr>
<td><strong>PART THREE</strong></td>
</tr>
<tr>
<td>INDICES</td>
</tr>
<tr>
<td>LIST OF PERIODICALS DOCUMENTED</td>
</tr>
<tr>
<td>AUTHOR INDEX</td>
</tr>
<tr>
<td>TITLE INDEX</td>
</tr>
<tr>
<td>LIST OF SYMBOLS AND ABBREVIATIONS</td>
</tr>
</tbody>
</table>

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My dissertation on "Arms Control and Disarmament - An Annotated Bibliography" has accumulated many depts. And it is a pleasure for me to thank all those who helped me in many ways in completing this work.

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Finally I appreciate the help which was rendered from different sources and without naming those sources, I pay my thanks to them.

(MUJAHID-UL-MULK)
AIM, SCOPE AND METHODOLOGY

01 AIM AND SCOPE:

The Hague Conference of 1898 was the first serious attempt to reduce the burden of armament and world war I necessitated some form of an agreement to enforce disarmament and arms control. The world war II was enormously destructive and the situation worsened further by the invention of nuclear weapons. The League of Nations, the UN and various other committee and commissions have devoted a major portion of their effort to reduce and eventually eliminate arms. Various treaties like SALT, START, outer space treaty, Treaty of Tlatelolco, NPT, Sea-Bed treaty etc. have also been signed to this effect.

At present fifteen countries possesses chemical weapons and up to have the capability to make them. Any further increase in number of nuclear weapons states would lead to greater instability in the world at large scale. The super powers have so far exercised considerable restraint time and again, thus trying to make the world peaceful and a better place to live in.

Therefore arms control is the policy of securing negotiated limits or reductions on the deployment of weapon systems, and, Disarmament refers not only to the giving up arms but also to any limitation placed on their development or deployment. It covers proposals ranging all the way from complete elimination of national armament to a simple
freeze on certain types of weapons.

Therefore there is a need to intensify this effort, particularly at this juncture, when all out efforts is being made to attain self-sufficiently. However, like all emerging research areas, paper published in these areas are scattered and retrieval is difficult. Here an attempt is made to collect some important published papers and compile bibliography which will be very useful for the researcher of our country.

I was given the task of preparing an annotated bibliography of 212 articles on "ARMS CONTROL AND DISARMAMENT" as it was thought that it might be of great use to research scholars in this field.

Part one deals with introduction of the topic i.e. its historical background and development of different types of weapons and their application and effects. Part two which is the main part of the present study consists of an annotated bibliography of 212 articles on the topic. Part three however deals with indices.

02 METHODOLOGY :

The material was collected from different journals from the Seminar library of Departments of Political Science, Centre for Strategic Studies, centre for west Asian Studies, Library of coaching and guidance cell, and Maulana Azad Library, AMU, Aligarh.
021 STANDARD FOLLOWED:
The Indian standard recommendations for bibliographical references (IS: 2381-1963), Indian Standard recommended for abbreviation for titles of periodicals (IS: 18-1949) (in some articles and Classified catalogue code) (CCC) of Dr. S.R. Ranganathan have been followed. In certain cases where the said standards become unuseful, I have preferred my own judgement.

022 SUBJECT HEADINGS:

Attempt has been made to give co-extensive subject headings as much possible. An effort has been made to follow postulates and principles given by S.R. Ranganathan in the formation of subject headings, and allowed by natural language. If more than one entry comes under the same subject heading, there are arranged alphabetically by the authors' name.

023 ARRANGEMENT:

The entries in this bibliography are arranged strictly alphabetically among the subject headings.

The ENTRY ELEMENT of the author(s) is in capitals, followed by the secondary element in parenthesis using capital and small letters and then the title of the article, subtitle (if any), then name of the periodical in
abbreviated form (if needed) being underlined followed by the volume number, issue number, the year, giving by using inclusive notation of the pages of the articles. Then each entry is followed by an indicative abstract of the article.

The items of the bibliographical reference for each entry of a periodical articles are arranged as follows:

(a) Serial number
(b) Name of the author/authors
(c) A full stop (.)
(d) Title of the article including subtitle and alternative title if any.
(e) A full stop (.)
(f) Title of the periodical being underlined
(g) A full stop (.)
(h) Volume number
(i) A comma (,)
(j) Issue number
(k) Semi colon (;)
(l) year
(m) A comma (,)
(n) Month
(o) Semi colon(;
(p) Inclusive pages of the articles
(q) A full stop (.)
0231 **SAMPLE ENTRY** :

207. KILGOUR (D Marc). Site selection for on site inspection in arms control. *Arms Control* 13, 3; 1992, Dec; 439-62.

02311 **EXPLANATION** :

This article is taken from the periodical "Arms Control" which is entitled as "Site selection for on site inspection in arms control" written by "D Marc Kilgour", in 3rd number of 13th volume of December, 1992 year, on the pages from 439 to 462, against this entry.

024 **ABSTRACT** :

The entries in the bibliography contain abstracts giving the essential information about the articles documented, I have given indicative abstracts as well as informative abstracts. After searching the literature, entries were recorded on 7" x 5" cards.

025 **INDICES** :

The part three of the bibliography contain Author, and title indexes in the alphabetical sequence. Each index guide to the specific entry or entries in the bibliography.

A list of journals has been given along with their place of publication and frequency. Another list consisting of the signs and symbols with their full form and meaning is also provided.
* PART ONE *
* INTRODUCTION *
Arms race is not a new phenomenon in international relations. It was as well a feature of human society in medieval times. However, at the time arms-race was not as consistent a feature as at present. It was resorted to only at the time of acute tension among the nations. As and when the tension subsided the arms race also came to a halt. Further, at the time the race for armaments was quantitative and states preferred to acquire more and more armaments. But with the advancement of technology the arms became more sophisticated. With this emphasis, arms race shifted from quantity to quality, viz. the states started acquiring more and more sophisticated weapons. In fact, after the second world war there was a mad race between Soviet Union and United States of America to outwit each other in the acquisition and development of more and more sophisticated weapons.

As a result of arms race in our times the dangers of nuclear war have greatly increased. There is a growing realisation amongst the world statemen to put a halt to this mad race and to evolve some mechanism so that the peace of the world is not threatened. This was sought to be achieved through disarmament and arms control.
DIFFERENCE BETWEEN DISARMAMENT AND ARMS CONTROL

The term 'disarmament' and 'arms control' are often confused and taken as identical. In reality they differ from each other, even though they deal with different aspects of the same problem. Disarmament does not necessarily imply control of arms, as arms control does not necessarily mean a reduction in armament levels. Disarmament means a plan or a system for the limitation, reduction or abolition of armed forces, including their arms and equipment and other related items like military bases and budgets. On the other hand arms control means a cooperative or multilateral approach to armament policy where armament policy includes amount and kinds of weapons, forces, development and utilization in periods of relaxation or tension.

ARMS CONTROL:

Arms control can usefully be divided into two types: one is the control over existing weapons systems, the other, sometimes called pre-emptive arms control, tries to prevent the original deployment of some new or potential weapon. The most important international successes in arms control have been the two Strategic Arms Limitation Talks treaties between the USA and the USSR, -------------- --------------- signed in 1972 and 1979, which put limits on the numbers and types of Strategic nuclear weapons
either side could deploy. It could also be argued that the Anti-Ballistic Missile Treaty which formed part of SALT I was a successful application of pre-emptive arms control. In limiting the number of ABMs which the USA or the USSR could build, and setting firm restrictions on the testing and development of new methods of Ballistic Missile Defence (BMD), it was essentially preventing the emergence of a weapons system rather than controlling the deployment of one that had already been achieved with any degree of reliability.

The history of arms control negotiations since the late 1970s has been complex and chequered. At the level that most people see as the highest priority, which is strategic nuclear arms control, there has been no progress since SALT II, though both the Reagan and Gorbachev administrations appeared eager to make some sort of progress in this area. Next in importance to strategic nuclear controls, most would place the limitation of Intermediate Nuclear Forces (INF). When the Soviet Union began to modernize its INF forces in the late 1970s with the SS-20 intermediate range rockets, NATO responded with what was called the Twin-Track policy. This was to begin preparations to offset the SS-20 threat by deploying both Ground-Launched Cruise Missiles (GLCMs), and a new generation of the existing Pershing missile, and at the same time to pursue an arms control agreement with the USSR.
which would either ban or severely limit the numbers of either side's modernized Theatre Nuclear Forces. These negotiations, held in Vienna, finally collapsed and the USA went ahead with GLCM and Pershing deployment in Europe, while the Soviet Union increased the numbers of its SS-20 missiles. However, after a lengthy period of complete failure to make any progress towards arms limitation in this area, negotiations took on renewed energy and flexibility following the Reykjavik Summit of October 1986. Further initiatives from Secretary General Gorbachev during the first half of 1987 raised hopes of an agreement on INF reductions being achieved.

While the greatest media emphasis is placed on these nuclear arms control efforts, major effort has also gone into attempts at Conventional arms control, in a series of negotiating fora over a long period of time. Briefly, there are three fora and areas of attempted arms limitations. The longest running, in their current form, are the talks in Vienna on Mutual and Balanced Force Reductions (MBFR), which have been in progress since 1973 - with virtually no success. The main aim here is to withdraw proportionate numbers of Soviet and US troops from the European theatre, to be followed by equivalently proportional numbers of troops from other Warsaw Pact and NATO members.
A completely separate approach to increasing international safety by negotiated agreements in the conventional area has been the attempt to agree on what are known as Confidence Building Measures (CBMs) or sometimes Confidence and Security-Building Measures (CSBMs). This means that both the Warsaw Pact and NATO would inform each other of planned troop exercises and war games, possibly limit the number of troops engaged in them or observe restrictions on where in Europe they could be held, and allow observers from the other alliance to monitor the exercises. The idea is to remove, as far as is possible, the fear of surprise attack under cover of major troop movements for training purposes. Some very limited progress has been made in notification of such exercise and arms control experts in Western Europe and the USA have some degree of hope that further progress can be made in this area. The main work on confidence building has been conducted under the auspices of the Conference on Confidence and Security Building Measures and Disarmament in Europe (CDE), itself part of the Conference on Security and Co-operation in Europe (CSCE), in Stockholm since 1984.

The final major area of conventional arms control is the attempt to achieve a globally valid and enforceable complete ban on the production and stockpiling of Chemical Weapons in a Chemical Warfare Convention. Negotiations on such a convention have been in process in one form or another, since 1967, and the most recent form of
of negotiations, which have been running since 1982 in the Forty Nations Conference on Disarmament at Geneva, were thought to be capable of some degree of success towards the end of the 1980s.

These several arms control fora, with their bewildering array of animals, and various and overlapping membership, make even the experts confused. However, it is generally thought better to have a wide range of bodies trying to deal with relatively specialized topics, than to risk obscuring possible agreements by combining issues on which one or other side might be intransigent with others where mutual self-interest may be discovered. What all the issues and fora have in common is a central problem, that

**Verification.** Mutually acceptable limitations can often be arrived at by negotiation, only for the two sides to become deadlocked because of mutual distrust.

Typically, the Western countries have demanded that they be allowed ways of checking that Warsaw Pact countries really are observing the limitations. The USSR has traditionally responded by saying that no form of verification could be accepted which involved intrusive inspections of sites in Warsaw Pact territory. Instead they have argued that formal commitments should be enough - that nations should trust each other. Furthermore, they argued
that adequate means existed to carry out remote checks without entering another nation's territory. There were suggestions in 1987 that the so-called Glasnost (openness) atmosphere in the Soviet Union might lead to increased willingness to accept verification procedures. If so, this would place the Western countries' position on inspection under closer scrutiny.

External techniques for verification are usually referred to as National Technical Means (NTMs) and involve, for example, observation by satellites to check on deployment of missiles or radar stations, or long-range seismographical equipment to monitor underground nuclear testing. The problems are obvious: satellites cannot see through the roofs of buildings, and seismographs may not be able to distinguish categorically between an earthquake and a nuclear explosion. It is impossible for those without access to classified material to be sure how often the West's complaints about the inadequacy of NTMs are real, and how often they are just excuses not to ratify an arms control agreement which might be against its interest. Similarly, one cannot know the extent to which Soviet objections to on-site inspections have stemmed from a legitimate fear of the security risks, and a belief that their international status would be impugned, or from a calculated intention to cheat.
The consequence is that, even on the existing agreements like SALT I and SALT II, and the ABM Treaty, both sides have periodically accused the other of having broken the agreement, but can only offer evidence that is usually less than fully convincing. There is little doubt that the USA has committed technical breaches of SALT II (which has never been ratified by the US Senate, in any case) since late 1986.

The end of 1990 appeared to signal the successful completion of the current round of East-West arms control negotiations. An agreement on Conventional Armed Forces in Europe (CFE) was signed by the NATO and WARSAW pact countries on 19 November 1990, and an agreement on confidence and security Building Measures (CSBM) was also signed in November. In Dec. the US and the USSR agreed to a summit meeting in Moscow the following February in order to sign a strategic Arms Reduction Treaty (START). Earlier the US senate and the Supreme Soviet had ratified the verification protocols for two nuclear testing treaties, while a bilateral agreement halting production of chemical weapons and reducing US and USSR stockpiles to 5,000 agent tons on each side had been signed the previous way.

However, these were made for reason of defence policy or as arms control tactics. Verification remains the biggest single restriction on arms control progress, and often leads to impressive sounding.
CONVENTIONAL ARMED FORCES IN EUROPE:

Notwithstanding the problems which emerged after its signing, the CFE Treaty remains an historic agreement that, if implemented, will ensure the destruction or permanent removal from Europe of over 125,000 tanks, artillery, armoured vehicles, aircraft and helicopters. The 110 page Treaty is by far the most complex and intricate arms control agreement ever signed. It is therefore all the more remarkable that it took the 22 signatory states just 20 months to negotiate.

START

Negotiations on reducing strategic offensive weapons have proceeded at a remarkably slow pace since the basic framework was first agreed at the Rejkjavik summit in October 1986 and further refined at the Washington summit a year later. It took nearly two and a half years to resolve residual differences over cruise missiles, mobile intercontinental ballistic missiles (ICBM), and the relation of offensive force reductions to constraints on defensive deployments. Nearly all of these issues had been resolved by the time of the Bush-Gorbachev summit in May-June 1990.

The only two issues which seriously threatened the completion of the treaty were the US desire to limit the modernization of the SS-18, and Soviet demands that the US
halt its strategic co-operation programme with the UK once the latter had modernized its sea-based deterrent. Both of these issues were resolved during the Houston ministerial in December: any further modernization of the SS-18 would not involve missiles with more launch weight or thor- weight than the latest version of the missile, while transfer of nuclear systems to third parties was resolved through an agreement to disagree, with each side interpreting the standard non-circumvention clause in its own way. The United States will issue a statement indicating that 'existing patterns of co-operation' will remain unaffected by START, while the USSR will declare that if the strategic balance is altered as a result of such co-operation it will consider this to be grounds for withdrawing from the Treaty. The UK government, meanwhile, has assured Moscow that it has no intention of deploying more than four Trident submarines.

Once these largely political issues were resolved, only minor technical disputes remained, which enabled the two sides to agree to hold a summit in February 1991. However, shortly after the summit was announced, Moscow's principal arms-control advocate, Eduard Shevardnadze, resigned as Foreign Minister, in part because of growing opposition within the Soviet military to agreements he had already reached. The violent crackdown in the Baltics and the onset of war in the Gulf distracted the attention of
the top political leaders from arms control, leaving the latter without clear direction. The Moscow summit was consequently postponed and a START agreement is now hoped to be ready for signature in late spring 1991 provided the differences over the CFE Treaty are resolved.

In anticipation of its possible conclusion, the main provisions of the pending agreement are outlined below:

**Force Limitations**

START will limit deployed ICBM, sea-launched ballistic missiles (SLMB), and heavy bombers to 1,600 on each side. These delivery systems can carry on more than a combined total of 6,000 accountable nuclear warheads. In addition, heavy ICBM are limited to 154 (with no more than 1,540 warheads), ballistic missile warheads to no more than 4,900, and warheads on mobile missiles to 1,100. Sea-launched cruise missiles (SLCM) are not constrained by the Treaty, although a politically binding side agreement commits each party to deploy no more than 880 of these missiles. A similar side agreement limits deployment of the Soviet Backfire bomber to 500 and also commits the USSR not to deploy the bomber with a refuelling capability.

START allows modernization of all strategic systems with but a few exceptions. Specifically, it will ban new types of heavy ICBM; heavy SLBM and their launchers; mobile
launchers for heavy ICBM; new types of UCBM and SLBM with more than ten warheads; flight testing and deployment of ICBM and SLBM with more warheads than those declared in the Washington summit communique of December 1987; ICBM launchers with rapid reload capabilities; and the equipping of long-range air-launched cruise missiles (ALCM) with more than one warhead. In addition, since START deals with strategic nuclear weapons only, there are no limits on non-nuclear long-range ALCM if these are distinguishable from nuclear ALCM. Nor are heavy bombers which carry only conventional armaments, or are used for reconnaissance and electronic warfare, limited by the Treaty; some 100 heavy bombers may in fact be converted to these types of aircraft.

The above force limitations apply only to deployed missiles and bombers. Each ballistic missile is attributed the number of warheads agreed to in the Washington summit communique.

Bomber counting rules are perhaps START's most remarkable feature. While penetrating (i.e. non-ALCM carrying) bombers like the US B-1B and B-2 and Soviet Blackjack bombers generally carry 12 to 16 bombs and short-range attack missiles, under START their entire weapon load will count as just one weapons against the 6,000 weapon ceiling.
NEW ARMS CONTROL CHALLENGES:

The Gulf war clearly demonstrated the need to curtail the spiral of armaments - both conventional and unconventional - throughout the Middle East. The fact that it required the deployment of three quarters of a million troops to the region underscores that the spiral is out of control. In future crises, it may be neither possible more profitable to resort to the same response. One undeniable lesson of the war is that the political health of a region depends on prevention rather than cure. Arms control is a vital ingredient of such preventive measures.

Arms control in the post-war era should stress three complementary factors. First, there is scope for unilateral as well as co-operative measures on the part of suppliers to halt the spread of weapons of mass destruction and the means for their delivery, as well as to limit the scope of the transfer of modern weapons of war. Second, there is a pressing need for regional arms-control measures to control the expansion of armaments and move towards their reduction in the future. Finally, global measures are required to halt the proliferation of weapons of mass destruction and their delivery systems, to strengthen inspection provisions, and to ban certain particularly odious weapons.

UNILATERAL AND CO-OPERATIVE MEASURES:

The two most important unilateral measures that all
major supplier countries can adopt involve export controls and the imposition of mandatory sanctions. The former should be geared to preventing the export of many dual-use unconventional technologies - nuclear, chemical and biological - to unstable regions and potentially aggressive powers. Export controls could also be imposed on more conventional weapons with an eye towards limiting the armaments spiral in the Middle East and other regions. Mandatory sanctions should apply both to users of weapons of mass destruction as well as to companies which supply the technology necessary for the development of these weapons.

The utility of these unilateral steps will depend foremost on the degree to which supplier states co-ordinate their actions. It will be necessary to ensure that export controls and sanction guidelines are similar in scope. In addition, enforcement of export controls will benefit from a sharing of intelligence in dealing with companies which violate rules. Agreement on the scope and application of sanctions is also necessary to enhance their deterrent effect.

Useful efforts at co-ordination have already been taken in the area of chemical weapons and missile technology. In 1985, a group of Western industrialized countries formed the Australia Group to harmonize controls
over the export of chemicals that could be used to make chemical warfare agents currently, the export of 15 chemicals is subject to specific government approval, while a warning list containing an additional 35 chemicals has been circulated to private companies in the hope that they would inform governments of any country's interest in acquiring them. Although others, including the Soviet Union, have adopted legislation controlling the export of such chemicals, the effort to limit chemical weapons proliferation would be strengthened if potential suppliers in Europe as in the developing world were to adhere - either formally or informally - to the Australia Group guidelines.

A similar effort has guided policy in the area of missile technology. In 1987, the countries in the Group of Seven (G-7) established the Missile Technology Control Regime (MTCR), designed to limit the export of technology necessary for developing missiles with a range of 300 km and over and with a payload larger than 500 kg. Although somewhat successful, the MTCR suffers from an insufficiently large membership; neither major missile exporters such as the USSR, China and North Korea, nor aspirant exporting countries like Argentina and Brazil, are members, although the USSR has indicated it would unilaterally abide by rules comparable to those of the MTCR, and China has exercised self-restraint since 1989. A
concerted effort to expand the *de jure* and *de facto* membership of this regime beyond the Western countries should be undertaken in an effort to control weapons political (if not military) significance was clearly demonstrated by the Gulf war.

Although there were initial efforts during the 1980s to control the spread of CW and missile technologies, equivalent efforts to constrain the transfer of more conventional armaments were not made previous efforts to limit arms transfers, including the conventional arms transfer talks in the late 1970s, failed because of political differences among the participants and a more general lack of urgency. The end of the Cold War removes a major reason for using arms sales to achieve political ends, while the possibility of being forced to take action against a well-armed adversary should strengthen interest in limiting the transfer of armaments to politically volatile regions. Another attempt to constrain conventional arms transfers in a co-ordinated UN Security Council bear a special responsibility in this regard since they account for some 85% of conventional arms transfers.

Whatever the unilateral and co-operative measures adopted, the most difficult, but nevertheless the most important step, must be consistency in applying measures to allies and potential adversaries alike. This is important
not only to enhance the credibility of these measures, but it is also in the long-term self-interest of the countries adopting these measures. As the disaster with Iraq has shown, erstwhile allies can become dangerous opponents. How difficult it is to apply this stark lesson is shown by one of the first steps undertaken by the Bush administration in response to the Iraqi invasion; the announcement of major new arms sales to countries in the region.

REGIONAL MEASURES:

The effectiveness of unilateral and co-operated measures will depend to a large extent upon the degree to which they are supplemented by regional and global measures. The objectives of the former should be: to reduce the level of armaments currently present in the Middle East; and to remove towards the elimination of weapons of mass destruction, while sharply curtailing their means of delivery. Achieving the second might prove easier than the first. Although limiting the inventory of conventional weapons possessed by key countries in the Middle East is highly desirable, movement towards this goal will depend first on setting the political differences that exist among these states. Only once the perceived threat to security had clearly diminished will these countries reduce their present reliance on large quantities of lethal weaponry. This is particularly true in the Middle East.
since the manifold variety of perceived security threats for each country makes it currently impossible to define an adequate level of armaments. For example, a purchase by Saudi Arabia might be perceived as destabilizing by Israel, but indispensable to cope with Iraq (or Iran).

While progress towards a political settlement will also help in the search to eliminate weapons of mass destruction, it is possible that this might be achieved at an earlier date. A traditional obstacle to eliminating one category of weapons of mass destruction, it is possible that this might be achieved at an earlier date. A traditional obstacle to eliminating one category of weapons in the region (such as chemical weapons) has been the insistence on the part of some Arab countries that their right to possess CW should not be abridged so long as Israel was a nuclear power. More recently, however, there have been signs that every country in the region recognizes that its security might be enhanced if steps were taken towards the elimination of nuclear, chemical and biological weapons from the region, Israel is already on record in support of moves towards nuclear and chemical weapons free zones in the Middle East, while Egypt has proposed that the region become a zone of free of all weapons of mass destruction. In addressing the security requirements of the region in the months ahead, it would be useful to explore these proposals in greater detail.
GLOBAL MEASURES:

While events in the Gulf have highlighted the problems in the Middle East, political volatility is not limited to that region. Success in arms control will therefore ultimately depend on global measures. In the first instance, these should focus on nuclear, chemical and biological weapons and missiles.

The 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) has proved remarkably successful in stemming the spread of nuclear weapons. However, the Treaty comes up for renewal in 1995, and complaints on the part of many non-nuclear weapons states regarding the lack of progress in strategic arms control generally, and the cessation of nuclear testing in particular, poses a threat to the regime. Therefore, priority should be given to steps ensuring the renewal of the Treaty.

Any regional effort to eliminate CW would be more likely to succeed if it were supplemented by global measures. It is clear that with a concerted political effort on the part of the United States and the Soviet Union, a convention banning the production, possession and transfer of chemical weapons could be signed in 1992. At present, the conclusion of this convention is blocked inter alia by the US position on two inter-related issues. The first concerns the retention of a security stockpile of
chemical weapons until all other 'CW-capable' states have joined, while the second relates to retaining the right to retaliate in kind in the initial years of the convention. The Bush administration's reluctance to allow challenge inspections without right of refusal (though originally contained in the US-proposed draft treaty) is also a major obstacle.

The Gulf war has provided perhaps the clearest evidence to date that the possession of chemical weapons by even a heavily armed and clearly aggressive country does not deter military intervention on the part of major powers. If further underscores the fact that there is no military or strategic basis to the Bush administration's contention that the use of CW is deterred only by the threat of retaliation in kind. As to the US position on challenge inspections, the war again demonstrates that the benefits of an unlimited right to inspect suspect sites in other countries outweigh the slight risk of allowing international inspectors in or near other sensitive facilities. In short, there is little reason to hold up completion of a CW convention.

Although biological weapons (BW) are prohibited by the Biological Weapons Convention which was signed in 1972 and came into force in March 1975, there are no provision for verifying the ban. The Convention came up for review in March 1980 after an explosion occurred at a military
compound in Sverdlovsk, in the USSR. The explosion allegedly released a strain of bacteria into the atmosphere, but no verification was ever possible. In September 1986 a second review conference in Geneva improved some of the articles of the original Convention but failed to deal with the question of verification. The threat that continues to exist is shown by the fact that Iraq, a signatory of this Convention, is considered by the United States to possess BW. A strong case can be made that the negotiation of verification rules for the 1972 Convention is long overdue.

Finally, the Gulf War has shown that, the inaccuracy of the Scud and the success of the Patriot notwithstanding, there is a need to address the growing proliferation of ballistic missiles. With the planned elimination of US and Soviet ground-based missiles from Europe, it is time to think about a treaty which would expand this ban worldwide. Specifically, the multilateral treaty banning all ground-launched missiles with ranges between 100 and 5,000 km could be modelled on the 1987 Washington treaty which banned ground-based cruise and ballistic missiles with ranges between 500 and 5,000 km. The fact that the US and the USSR have opted to forgo deployment of these missiles should provide an incentive for other countries to follow suit. Moreover, in order not to inhibit the legitimate interest of some countries in
seeking access to space, a new international agency might be set up which would commit the major powers to provide the requisite technology and allow those countries without a space-launch capability access to the facilities at cost.

There is no paucity of other ideas for unilateral, co-operative, regional or global arms-control measures. This only emphasizes the fact that the end of Cold War merely signals the completion of the traditional East-West arms control agenda, not of arms control as such. Indeed, with the end of the Cold War the need to meet new arms-control challenges has been exposed by the Gulf War. In each case, effective US-Soviet co-operation will provide the lynchpin to securing agreement on far-reaching arms-control measures. With such co-operation, arms control might have a chance; without it, failure will be certain.

START - ACHIEVEMENTS AND LIMITATIONS:

George Bush and Mikhail Gorbachev affixed their signatures on the Strategic Arms Relation Talks (START) treaty at the Moscow Summit on July 31. START for the first time imposes formal constraints on strategic offensive weapons. The signing of the treaty at a summit meeting had only ceremonial significance as the two sides had ironed out all their differences and the draft was ready for signature.
It took nearly nine years and sea changes in the security perspectives of the two countries, resulting from momentous changes that took place in Europe and the Soviet Union itself, to bring the START negotiations to fruition.

The US put forward two-phase plan for reduction of strategic arms. In phase one the Soviet Union was required to cut its missiles numbering 2350 to 850. The number of warheads was to limited to 5000 each. Of these only 50 per cent could be mounted on land based missiles. The number of heavy bombers was to remain at the same level of 400 for the US and 350 for the Soviet Union. The Cruise missiles were to be discussed but not limited until phase two. The soviet Union was required to reduce its SS-18 missiles.

In phase two the Soviet Union was to give up its 3 to 1 advantage in ballistic missiles. The Soviet Union did not put any counter-proposal.

Experts predict that this may turn out to be the last comprehensive treaty. In future, agreements would be more modest and on more specific issues. Budget constraints probably would be more effective force in limiting nuclear arms.

Despite its limitations START is being held as "historic". France welcomed the signing of the treaty but did not give any indication it was going to trim its own
arsenal. While welcoming the treaty Britain and China remained silent on this vital question. China did not fail to point out that the US would still have 9,000 nuclear warheads and the Soviet Union 7,000, enough to destroy the other several times over. Whatever position these countries may take the pressure of world opinion would be on them to cut their own arsenals.

START's significance is more in political rather than in the area of reduction of strategic nuclear missiles. As a result of the agreement on strategic weapons the United States and the Soviet Union have moved one step closer to each other.

"We can now take steps to make the world a less dangerous place than ever before in the nuclear age", Mr. Bush said in a prime time television address from the oval office of the White House.

The President undertook several steps unilaterally, without waiting for a complementary Soviet commitment. He grounded all US strategic bombers and took them off the alert status after more than 30 years.

He also removed from alert status all missiles covered by the Strategic Arms Reduction Treaty (START).

Concluding his speech, Mr. Bush said: "destiny is not a matter of chance, it is a matter of choice, it is not
a thing to be waited for, it is a thing to be achieved. The United States has always stood where duty required us to stand. Now let them say that we led where destiny required us to lead - to a more peaceful, hopeful future. We cannot give a more precious gift to the children of the world".

**DISARMAMENT**

Disarmament has been a goal of peace movement and individual peace leaders, as well as out- and out pacifist, since the mid 19th century or even earlier.

The history of disarmament can be traced back on the Treaty of Westphalia in 1648. The treaty stipulated that all existing fortifications be demolished and no new fortifications be erected. However, the first systematic proposal for the reduction of armaments was mooted by Czar of Russia in 1816 when he proposed to the British Government the reduction of all types of armed forces. However, these proposals were not seriously received and failed to produce any impact. In the year 1863 and 1869 France also submitted certain proposals for the reduction of armaments to the Great Power but they also met the fate of the proposals submitted by the Russian Czar. Other powers like Britain (1870) and Italy (1877) also initiated steps to put a stop to armament race but without any success.
The most systematic effort to reduce the armament was made by Tsar Russia in 1898 when he addressed a note to the various powers of Europe to meet at Hague and work out a scheme for reduction of arms. These proposals received warm response and resulted in the First Hague Peace Conference. This Conference was attended by 28 states. The next conference held in 1907 also initiated proposals for the reduction of arms and expenditure on military forces, but this also did not find favour with the powers. Thus both the Hague Conferences failed to solve the problems of arms race.

DISARMAMENT AFTER FIRST WORLD WAR:

The devastation caused by the First World War greatly stirred the conscience of mankind and the statemen of the world started giving serious thought to the need of abolition of arms and ammunition. The Treaty of Versailles, which established peace after World War I, specifically provided that the maintenance of peace requires the reduction of national armaments to the lowest point consistent with national safety and the enforcement by common action of international obligation. The seriousness of the world statemen to regulate arms is evident from the fact that they charged the League of Nations with the duty of securing an agreement on the general disarmament. To facilitate the task of the League it was provided in the
Covenant that the membership of the League shall be available only to those countries who were willing to accept arms regulations proposed by the League.

PREPARATORY COMMISSION AND GENEVA CONFERENCE:

In 1925 the League set up the Preparatory Commission and entrusted it with the responsibility of preparing a provisional draft treaty concerning various questions of disarmament.

EFFORTS OUTSIDE THE LEAGUE:

Outside the league also efforts to control the arms and secure disarmament were made. In 1921-22 at the Washington Conference the five major powers (Britain, USA, France, Japan and Italy) agreed to fix their respective naval strength. They made an effort to come to some understanding regarding cruisers, submarines, destroyers and aircrafts but could not succeed. As the treaty remained unratified the understanding automatically lapsed.

The efforts at disarmament in the inter-war period both through the League of the Nations and outside failed to achieve anything substantial. In fact almost all the states were interested in strengthening their respective positions rather than reducing the weapons.

DISARMAMENT AFTER WORLD WAR II:

The enormous destruction caused by the Second World
War roused the conscience of the world statemen. Fearing that another war may completely wipe out the human race they started making more frantic efforts to regulate the armament. The UN Charter also laid great emphasis on the regulation of agreements. At least three of its articles were devoted to this problem.

**ATOMIC ENERGY COMMISSION:**

Soon after the adoption of the UN Charter the Atom Bomb was exploded in Hiroshima and Nagasaki in Japan. The untold suffering caused by the bombarment of these two towns of Japan led to a wide-spread demand for devising a system of control to prevent the use of atomic energy for destructive purposes, and use of humanitarian and peaceful purposes. Accordingly, on 26 January 1946 the General Assembly decided to set up an Atomic Energy Commission consisting of all the permanent members of Security Council and Canada.

**COMMISSION ON CONVENTIONAL ARMAMENTS:**

In pursuance of the General Assembly resolution of December 1946, the Security Council set up a Commission on Conventional Armaments in February 1947. The Commission was expected to prepare and submit to the Council within three months proposals for "the general regulation and reduction of armaments and armed forces". The Commission held its
first meeting on 24 March 1947 and finally adopted a resolution on 12 August 1948.

DISARMAMENT COMMISSION:

The failure of these two Commission did not deter the world leaders and they continue their efforts to regulate the armaments. On the suggestion of the American President Truman that the two Disarmament Commissions should be merged, the General Assembly set up a Committee of Twelve members (11 members on Security Council and Canada) to report the ways and means whereby the work of the two commissions could be combined. The Committee recommended the merger of the two Commissions. Its recommendations were accepted by the General Assembly and a Disarmament Commission was created on 11 January 1952. The Commission took up a number of issues concerning arms and their reduction but failed to make much headway because of the divergence of views amongst the Super Powers.

ATOMS FOR PEACE PLAN (1953):

In 1953 President Eisenhower of USA came out with a new plan for peaceful use of atoms. This plan popularly known as Atoms for Peace Plan appealed to all those powers who possessed atomic energy material to contribute the same to the Atomic Energy Commission under the United Nations. This plan was also turned down by Soviet Union who insisted on prior agreement on prohibition of atomic weapons.
SOVIET PROPOSAL OF MAY 1955

In May 1955 Soviet Union suddenly submitted new proposal which was quite identical to the Anglo-French Memorandum in so far as it accepted the same force levels. However, this proposal was quite distasteful to USA because it insisted on dismantling of all United States overseas bases and a ban on nuclear tests.

THE GENEVA SUMMIT AND OPEN SKIES PLAN:

In July 1955 the chiefs of state from France, UK, USA and USSR met at Geneva to discuss among others the problem of disarmament. At this meeting USA proposed the 'open skies' plan. Under the plan both USA and USSR were to exchange military information which could be verified by mutual aerial reconnaissance. However, Russia did not feel convinced as to how inspection of the concealed nuclear weapons shall be possible. She also insisted that all actions in this regard should be subject to Security Council's decisions and hence veto of the Permanent Members of the Security Council. As these conditions were not acceptable to USA the plan fell.

NUCLEAR TEST BAN:

Encouraged by the announcement of Soviet Union in March 1958 regarding a unilateral ban on tests of atom and hydrogen bombas, three nuclear powers, USA, USSR, and B
Britain held a Conference at Geneva from October 1958 to April 1961. After long deliberations the three powers agreed to suspend forthwith all tests in the earth's atmosphere, in outer space, in ocean and underground. This was to be ensured through a world-wide detective system to be operated by a single neutral administrator and an international staff. However, Soviet Union, in violation of this agreement went ahead with the explosion of Megaton Bomb. This provoked USA to declare that she would also go ahead with similar explosion. As a result the progress made in the direction of securing nuclear test ban at the Geneva Conference was watered down.

TEN NATIONS DISARMAMENT CONFERENCE (1960) :

In 1960 ten nations, five from each block (USA, UK, Canada, France and Italy from Western block and Soviet Union, Romania, Yugoslavia, Poland and Bulgaria from the communist bloc) met at Geneva and made another serious bid to secure disarmament. As a result of prolonged deliberations the differences between the rival camps were considerably narrowed down. Soviet Union proposed a four year plan of complete disarmament spread over three phases. The Western nations did not respond favourably to the Soviet Plan and came forward with their own plan on March 1960. This Plan was not acceptable to the Soviet Union and her allies. As a result a stalemate was reached and finally
the Soviet Union and her allies walked out of the Conference. With this the Conference came to an abrupt end.

EIGHTEEN NATIONS DISARMAMENT CONFERENCE (1962):

In 1962 another conference was held at Geneva which is popularly known as Eighteen Nations Disarmament Conference. At this Conference also separate plans were submitted by USA and Soviet Union. This Conference was significant because the Neutral Nations also came forward with their own plan. They suggested the establishment of an International Commission of Scientists to process the data received from the observation posts and to report on all nuclear explosions. The Eighteen Nations Conference also could not accomplish anything and faltered over the issue of verification.

LIMITED TEST BAN TREATY (1963):

In June 1963 President Kennedy emphasised the need for a nuclear test ban treaty. The proposal received favourable response from Soviet Union and culminated in the Test Ban Treaty of 1963. This treaty concluded at Moscow on 5 August 1963, "prohibited the states from carrying out any nuclear weapon test explosion or any other nuclear explosion at any place under their jurisdiction or control". Though initially the treaty was concluded by the three Nuclear Powers, USA, USSR and UK, it was made open to all the states. In fact, both China and France (the other
nuclear powers) refused to sign the treaty because it did not insist on the destruction of nuclear stock-piles of USA and USSR.

**OUTER SPACE TREATY OF 1967:**

This treaty laid down the principles governing peaceful activities of the state in outer space and prohibited nuclear weapons and their landing on the moon and other celestial bodies for military bases. The treaty was formally signed on 27 January 1967 and came into force on 10 October 1967. Under the treaty the signatory states agreed not to place in orbit around the earth any objectives carrying nuclear weapons or other kinds of weapons of mass destruction.

**CONFERENCE OF NON-NUCLEAR WEAPON STATES (1968):**

In August-September 1968 a Conference of the Non-nuclear Weapons States was held at Geneva at the initiative of the General Assembly. This Conference was attended by 96 states including the four nuclear powers - USA, USSR, France and UK.

With regard to the establishment of the nuclear-weapon free zones, the Conference recommended that the non-nuclear weapons states should examine the
possibility and desirability of establishing military denuclearization of their respective zones.

NON-PROLIFERATION TREATY 1968 :

The Treaty on Non-proliferation of Nuclear Weapons was simultaneously signed at London, Moscow and Washington on 1 July 1968 and actually came into force on 5 March 1970. The treaty, based on the draft submitted by the Seventeen Nations Disarmament Committee, prohibited the transfer by nuclear weapon states to any recipient whatsoever of nuclear weapons or other nuclear explosive devices or of control over them. The signatory states were not to encourage or induce any non-nuclear weapon state to manufacture or otherwise acquire nuclear weapons or other explosive devices of control over such weapons or explosive devices.

BIOLOGICAL WEAPONS CONVENTION 1972 :

An effort to check the use of bacteriological and chemical weapons was made in 1972 by signing the "Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their destruction". The Convention signed on 10 April 1972 at London, Moscow and Washington actually came into force on 16 March 1975. The
signatory states agreed not to develop, produce, stockpile or otherwise acquire or retain micro-bial or other biological agents or toxin weapons, equipment of means of delivery designed to use such agents or toxins for hostile purpose or in armed conflict. They were to either destroy or divert to peaceful purpose within nine months of the enforcement of convention, all agents, toxins, weapons, equipment and means of delivery.

**STRATEGIC ARMS LIMITATION AND SALT 1972**:

Simultaneous attention was also paid to the limitation of the strategic arms with a view to achieve disarmament. The two super Powers - USA and USSR held prolonged negotiations at Geneva and finally agreed to meet at Helsinki. The negotiations continued for nearly four years before the conclusion of the strategic Arms Limitation Treaty of 1972. In fact, the agreement broadly consisted of two separate treaties viz. Treaty on the Limitation of Anti-Ballistic Missile System and the Interim Agreement on Certain Measures with respect to the Limitation of the Strategic Offensive Arms. While the former was concluded for an unlimited period, the latter was of five year duration.

The Anti-Ballistic Missile Systems Treaty permitted the two super powers to have only two sites for ballistic
missile defences, one for the protection of their national capital area and the other for the protection of the field of ICBMs. The treaty also laid down details regarding the dimensions of the ABM system the two countries were to have.

The Interim Agreement with regard to the Limitation of the Strategic Offensive Arms was a very complex agreement. It covered both land-based ICBMs and sub-marine launched ballistic missiles. The two powers were permitted to undertake modernisation and replace their strategic offensive Arms, but they had to scrupulously follow the numerical limits prescribed by the treaty. An agreement regarding the procedure of agreement was also reached between the two powers.

US-SOVIEIT ARMS PACT 1974:

Further progress in the direction of disarmament was made in July 1974 when USA and Soviet Union signed a 10 year pact, stipulating not only the limitation of the offensive nuclear weapons but also the stoppage of all underground tests of more than 150 miloton.

SALT II (1979):

SALT I signed by USA and USSR lapsed in October 1977. Both the powers continued to observe its provisions
and continued efforts for a new agreement. After prolonged negotiations they signed at Vienna on 1 June 1979 the SALT II treaty to limit the strategic offensive weapons for a period up to 31 December 1985. While concluding this treaty both the powers reaffirmed their desire to take further measures for further limitation and reduction of strategic arms with a view to achieve general and complete disarmament. As this agreement was in the nature of a treaty, it was sent to the US Senate for ratification, as required under the constitution. But before the Senate could ratify the same the cordial atmosphere was disturbed by the Soviet intervention in Afghanistan which jeopardised the ratification of SALT II.

During the year 1980 only limited contact took place between USA and Soviet Union on the question of arms control. The US Government motivated by the events in Afghanistan proceeded to review and to expand its armament programme. Despite this, Soviet Union repeatedly expressed its willingness to negotiate. On 18 February 1980, Soviet Foreign Minister Andrei Gromyko indicated the readiness of Soviet Union to carry on disarmament talks with the West, particularly on the reduction of nuclear arms in Europe if NATO's decision of December 1979 regarding modernisation (which involved employment of Pershing IIs and Cruise missiles) was cancelled or not implemented. As a result Preparatory US-Soviet talks on strategic arms limitation were held in Geneva from 16 October to November 1980 which
resulted in greater understanding of each other's position and they agreed to resume negotiations in 1981.

SOVIET PROPOSALS REGARDING PROHIBITION OF STATIONING OF WEAPONS IN OUTER SPACE:

In 1981, Soviet Union proposed a treaty of unlimited duration to prohibit the stationing of weapons of any kind in outer space, including stationing of 'reusable' manned space vehicle. The parties to the treaty were to undertake not to destroy, damage or disturb the normal functioning or change the flight trajectory of space objects of other states, if such objects were placed in the orbit in 'strict accordance' with the above mentioned provisions.

In December 1981 the UN General Assembly taking into account the proposals of the Soviet Union, required the Committee on Disarmament to embark on negotiations with a view to achieving agreement on the text of an appropriate treaty to prevent the spread of arms race to outer space. However, much progress could not be made due to the difficulties in reaching further arms control agreements relating to outer space because most of the satellites are used for military purpose. Further, the competition going on between the two supers in bound to generate pressure for preemptive action and thus decrease rather than increase the sense of security of the powers in question, bringing
no advantage to either side.

EFFECTS BY THE UN GENERAL ASSEMBLY:

During the year 1981, the UN General Assembly also initiated a number of measures to check nuclear weapons, chemical weapons as well as to promote the disarmament. The Assembly expressed concern over continued nuclear weapon tests and urged UK, USA and USSR to resume their trilateral negotiations (which were interrupted in 1980) on a comprehensive test ban treaty and to bring them to an early conclusion. It also suggested the conclusion of an international convention on the non-use of nuclear weapons in general and declared that the use of such weapons would be a violation of the UN Charter and a crime against humanity. Similarly, the General Assembly while calling for continuation of negotiations on convention prohibiting chemical weapons called on all the states to refrain from any action which could impede such negotiations and to specifically refrain from the production and development of binary and other new types of chemical weapons. It also requested that chemical weapons should not be stationed in those states where there are no such weapons at present.

With a view to promote disarmament, the General Assembly recommended that a world disarmament campaign should be launched and a conference be held at the United Nations to finance the campaign. It expressed the view
that a world wide collection of signatures in support of measures to prevent thenuclear war and arms race be started, which would help in creating favourable climate for achieving progress in the field of disarmament.

However, despite its active interest to effect arms control, the General Assembly could not attain much success due to an atmosphere of increased international tension.

REAGAN PLAN OF 18 NOVEMBER 1981:

On 18 November 1981 President Reagan of United States proposed a four point agenda suggesting (1) that the United States was prepared to cancel its deployment of Pershing II and ground launched cruise missiles if the Soviet Union would dismantle its SS-20, SL-4, and SS-5 medium and intermediate range ballistic missiles; (2) that USA would seek to negotiate substantial reduction in nuclear arms which would result in equal and verifiable levels and that to symbolize this the negotiations would be called START (Strategic Arms Reduction Talks); (3) That action should be taken to achieve equality at lower levels of conventional forces in Europe; and (4) That USA urged the USSR to join with it and many other nations to establish a western proposed conference on disarmament in Europe.

However, these proposals were outrightly rejected by the Soviet Union. The Soviet President Brezhnev said
that if the United States were prepared to agree to complete reduction of all kinds of nuclear weapons in the East and West, Soviet Union would be in favour.

INF TALKS AT GENEVA NOVEMBER (1981):

On 30 November 1981 talks between USA and Soviet Union on intermediate-range nuclear force (INF) commenced at Geneva. The deliberations were held in camera. But much progress could not be made. On 3 February 1982 Brezhnev proposed that both the sides should reduce their medium range nuclear weapons by two-thirds by 1990, but the proposal was rejected by President Reagan. On 9 February, 1982 Soviet Union proposed a modified plan but this was also turned down by USA the next day.

USA reacted sharply and stated that it would not tolerate any stationing of nuclear missiles in Cuba. On 31 March 1982 President Reagan said "I want an agreement on strategic nuclear weapons that reduces the risk of war, lowers the level of armament and enhances global security. We can accept no less."

START NEGOTIATIONS:

On May 9, 1982, US President suggested that formal START negotiations be held between the two countries at
Geneva in June 1982. He proposed two stages. During the first stage the number of the ballistic missile war-heads was to be reduced by at least one-third below current levels. During the second stage they were to achieve equal ceilings of ballistic missiles. The lan also insisted on effective verification procedures. But the plan was dismissed by Soviet Union "as a hopeless attempt to ensure US superiority. However, the plan said nothing about the programme to deploy MX missiles, strategic B-1 bombers and Trident nuclear missile submarines.

On 18 May, 1982 President Brezhnev made an offer of freeze on nuclear missiles and proposed freeze on the modernization and deployment of strategic weapons. He said that to begin the START talks on right note, three things should be done.(1) The talks should pursue the aim of limiting arms and reducing strategic arms rather than being a cover for the continued arms race and the break-down of the existing party. (2) Both sides should pay due regard to each other's legitimate security interests and acknowledge the principle of equality and equal security. (3) The positive achievements of earlier talks should not be overlooked. The proposals of Brezhnev were immediately rejected by USA.

The START talks opened in Geneva on 29 June 1982 in which the delegations of USA and USSR took part. Though the
talks were secret, the two delegations made certain statements regarding their respective positions, which virtually reflected the view they had already expressed. At these talks USSR offered to make substantial cuts in the long-range missile and bomber forces in return for US agreement to forego the deployment of new medium-range missiles in Europe and to accept stringent restrictions on all further cruise missile deployments. Thus Soviet Union tried to link INF and START talks.

SPECIAL DISARMAMENT SESSION OF GENERAL ASSEMBLY (JUNE 1982):

In June 1982, the General Assembly held a special session on disarmament in implementation of the resolution passed by the General Assembly in December 1978. The Assembly proceeded on the basis of a draft on comprehensive programme of disarmament drawn up by the working group of the UN Committee on Disarmament. The draft programme dealt with the disarmament problem under various headings viz. nuclear weapons; other weapons of destruction; conventional weapons and armed forces; military expenditure; measures for prevention of arms race on the seabed, on the ocean floor and in the subsoil thereof and in outer space; and establishment of zone of peace. At this session the Soviet Union announced that it would not be the first to use nuclear weapons. It may be noted that even before Soviet Union made this announcement. China had
made similar announcement in the Assembly in earlier months. In the special session again the Chinese leaders called upon the nuclear powers to undertake unconditionally not to use nuclear weapons against non-nuclear states and in nuclear weapon free zones and also not to be the first to use such weapons against one another "at any time and under any circumstances". The American President, Reagan, however, told the General Assembly that USA remained committed to peace and would do all could do to reach arms control accord with Moscow, but the past record of Soviet Union in Eastern Europe, Czechoslovakia, Hungary, Afghanistan and Poland raised doubts the sincerity of Soviet intentions.

Thus there were wide differences between the East and the West and the nuclear and the non-nuclear nations.

PROPOSALS REGARDING FREEZING OF NUCLEAR ARSENELS (NOVEMBER 1982):

On 22 November 1982, Andropov, Secretary General of the Soviet Communist Party reiterated the proposal for freeze on the nuclear arsenals of both countries as 'a first step towards agreement'. However, the proposals did not receive favourable US response. On the other hand President Reagan of USA emphasised the need to replace and modernize the US forces and also to proceed with the production and development of MX. This evoked strong reaction from Soviet leaders and they asserted that the MX programme was contrary to SALT-I and SALT-II treaties and would create
new obstacles to START negotiations.

**NEW US PROPOSALS ON START:**

In 1983 USA proposed 'build down' whereby each side while modernizing its forces would effect 5 percent reduction of its forces each year until 1992. According to this plan each new unit of ICBM fire power developed was to be matched by reduction of two old units of ICBM fire power and each new unit of submarine launched fire power was to be matched by dismantling the two old units. The proposal also envisaged the establishment of a Commission to work out the details of a build down.

The Soviet Union responded to US proposals and called for reduction of strategic nuclear delivery vehicles from about 2400 to 1800 or 1950, while demanding that the US must not deploy any new intermediate range missiles in Europe whatsoever. Soviet Union also demanded that the British and the French forces be counted in INF process. However, the British and French were determined to maintain independent deterrents which were not subject to US-USSR negotiations.
CONCLUSION

Disarmament is a problem having global orientation. It is not a problem of a particular country but the problem of the entire community of nation whether proliferator or non-proliferator. The resolution of this problem of disarmament is not an easy task. The international community has made various efforts to tackle the problem, but end result in this regard is not satisfactory. The development and procurement of weapons continues its pace has been slowing down after the dismemberment of USSR and the end of the cold war. In other words overall global domains for armament have reduced either due to the end of the cold war or the economic crunch.

The United States of America and Russia both continue to be impressive military powers in international relations. The Russian development of weapons is as hold due to the economic crunch. However the united States of America which in the wake of cold war, sought from the other arms supplying countries, to show restraint in the name of the global security, has itself become the world's biggest arm merchant. American sale accounted for 57% of the 24 Billion Dollars weapons which the developing countries ordered in 1992. In 1987 when the total developing world arms purchases were twice of what they are today. The US share was less than 13%. The total US weapons sales last year i.e. 1993 was
about 34 Billion dollars. The problems of disarmament is infact not being taken care of specially by powers like USA. The US arms sales are infact creating competitive vigor within Russia and Europe.

The developing countries in last few years have diverted their efforts to procure arms indigenously thereby reducing their dependency on the arms supplying countries. Moreover they also continue to procure arms through arms transfer deals and arms purchase. This phenomenon is quite visible in South Asia, where both India and pakistan are procuring arms by both means.

The situation in South Asia is that India and Pakistan have been involved in perpetual conflict since partition in 1948. So far the disarmament attempts in this region have no where reached and agreement - the chances for the disarmament seems to be very bleak with India advocating general disarmament covering all weapons and systems as well as all the countries of the world and, with pakistan accepting the restraint on its arms & armament only when India takes the precedance. The world has witnessed the drastic changes in international relations in last few years but the very basic nature of international politics continues to be anarchic, and in the absence of international authority to resolve the conflicting interest of nations' international relations, the ultimate
instruments which nations can employ for the resolution of their dispute is the use of force, and force is acquired primarily from the military strength of a nation and, the military strength is dependent on the procurement of arms and the development of new weapons systems, so, the arm race is not going to completely die down.

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ARMS CONTROL


The issue of arms control are too extensive and the underlying hostility too great to allow an immediate, comprehensive solution. Compromise must be achieved through a series of partial measures, each of which balance force reductions and modernization restrictions. Recent arms control negotiations have not focused on a balanced but limited combination of force reductions and weapon modernization restrictions, and that has virtually precluded success.

AFRICA


Examines the relationship of African arms imports to the international arms regime, to African domestic politics, and to domestic economies. Authors provide insight into the uses and sources of arms in sub-Saharan Africa. The authors conclude by suggesting that only a regional approach to arms control in Africa can successfully place the African problem on the international agenda and secure Africa's arms control objectives during the coming decade.

Arms control in post cold-war era must be pursued as an adjunct to, not a substitute for ways of dealings with sources of conflict and methods of managing disputes. While some of the potential causes of war are likely to lie with in the military arena, there is little reason to believe they will be the most potent ones.


The changing nature of world politics suggests a new role and a new importance for arms control. East-west tensions have eased, and an international diffusion of power is occurring, the past focus on US-Soviet arms control will not be sufficient in the future, although locking in the gains of previous and on going arms negotiations with the USSR is critical, it will also be necessary to construct enduring multilateral regimes to deal with emerging problems of proliferation of weapons. Preventing the proliferation of ballistic missiles, chemical, biological and nuclear weapons will become increasingly important. Arms control should attempt to slow the spread of dangerous technologies in order to gain to better manage their destabilizing effects.

Arrangement for insuring that arms control agreement survive and adapt to changing conditions after they enter into force have not received the degree of attention the subject deserves. Arms control treaties need verification and compliance arrangement that protect the security of the states concerned, provide a low-key channel for raising compliance question and instill confidence in public that their interests are being protected.


Examines how the level of tensions in the relationship between the US and USSR (measured by the conflict and peace Data Bank) influences - and is subsequently influenced by the timing of the occurrence of arms control agreements (ACA). Using probit analysis, it establishes that low to moderate levels of tensions and disputes have had an adverse effect on the probability of occurrence of an arms control agreement.
internationalization of the Polar Basin seems inevitable in the long run, and it is inconceivable that it could proceed without some form of restriction on military activities in the area. In the Antarctic the need is to preserve what has already been gained in the way of an arms control regime.

_____ ARMS RACE, USSR-USA


Arms control can not stop the arms race because in no real sense has there been any such thing as an arms race. Since there has been no arms race as far as the US is concerned. Arms control has not prevented the USSR from forging ahead in its military programs. Arms control is not desirable in that it does not serve the security need of the US, does not save money, and does not lessen the risk of war.

_____ ASIA

10. SEGAL (Gerald). Arms Control in Asia. Arm Control. 8, 1; 1987, May; 80-94.

If the geopolitical trend of history is a guide, then Asia has something to learn from Europe in its transition from economic boom and devastating war to armed peace and controlled conflict. Is Asia now ripe to begin considering various type of arm control that had been used
7. GARNETT (J.C) Risks associated with unverifiable arm control treaties. Arms Control. 7, 3; 1986; Dec.; 241-70.

Most significant arm control treaties can only be verified imperfectly. Statement who sign them inevitably take the risk of evasion. In the context of, projected arm control agreement, how likely is evasion? if it happen does it matter? it is important to understand term like "adequate verification" and to appreciate the thought process involved in assessing the risk of evasion. We need to judge not only the livelihood of evasion, but also the dangers resulting from evasion, and we need to combine those calculation in some way, which involves the greater risk the evasion which is less likely, but more serious, or an evasion which is more likely but less serious? These and other analytical issues, are examined in the context of current negotiations - practically in a area of chemical disarmament, a comprehensive test ban and mutual force reduction.


The possibilities for arms control in the Arctic are not totally hopeless and should be positively cultivated rather than discouraged. Some degrees of
in Europe and between the super power to help keep the peace? The immediate answer must be no, because Asia is obviously a very different place, and with very different problems.

___, ASIA-PACIFIC and INDIAN OCEAN


The deployment of large quantities of nuclear weapon in the Asian-Pacific and Indian Ocean regions presents tremendous danger to the countries of the regions. It is essential to define appropriate forms for US participation in the system of confidence building measures in East Asia on the condition that the US demonstrate a desire to avoid explosive situations. The normalization of relations between the countries of these regions does not require the cooperation of all the countries affected.

___, CENTRAL AMERICA

12. GOLDBLAT (Jozef) and MILLIAN (Victor). Arms Control in Central America. *ArmsControl*. 8, 1; 1987, May; 73-79.

Detailed proposals for stopping and reversing the militarization of the Central American Isthmus were put forward in the 1986 draft contradora Act on peace and cooperation in central America. The risk of military
confrontation between Nicaragua and its closest neighbour as well as the likelihood of direct US intervention, feared by Nicaragua, would have been considerably reduced. Limitation of armaments would have been coupled with confidence building undertakings. However, the position of the antagonistic proved to be too far apart to transform the draft Contadora Act into a binding international document.


The idea of eradicating chemical warfare by international treaty must now be seen to have a precarious future. Arms control is not but one of the routes whereby states can seek to improve their security against the possibility of adversary chemical warfare. Decision about the allocation of resources to the military routes of defence and especially deterrence, will eventually become irreconcilable with decisions necessitated by the negotiations. Chemical warfare is becoming a major focus of arms control.

In the coming months, G Bush will need to confront the hard choice of whether to reaffirm his earlier support for a complete and total chemical weapon ban, or to shift US policy towards more modest objective. This will require striking a balance between the risks of a chemical weapon convention and its potential payoffs, between most especially the potential military risks of undetected Soviet chemical weapon production and the benefits of a convention in bringing under control the spread of chemical weapon throughout conflict-prone third-world regions. Rather than stepping back from his earlier views, Bush should make clear that the rapid conclusion of a complete and total ban remains the top US priority in chemical weapon arms control.


The article purports to set out a general legal framework for conventional disarmament and arms control, taking into account international legal norms in force as well as proposal for new norms. Separate attention is paid to the question of planning, research and development, production, international, transfer, possession and stockpiling, stationing and employment in peace- and wartime. At the end, some reflections are offered on the present political perspective for conventional disarmament.
It is obvious that no dramatic result will be achieved in the near future. It might be possible to obtain some guidelines for international arms transfers and further restrictions on the use of certain weapon in war. The regional approach is particularly suited for conventional disarmament.

CONVENTIONAL WEAPONS


Two trends are apparent in contemporary security affairs: the improving prospects for arms control and the continued pressure on defense equipment budgets. While some arguments can be advanced that arms control will have little impact on procurement, other considerations suggest that arms control, in tandem with continuing detente, is likely to mean diminished equipment budgets and a preference for "non-offensive" equipment. In such a world, defense companies in Europe are likely to be hit needed for the continued viability of European defense industrial capabilities.

AIR POWER, EUROPE, WARSAW PACT

At the beginning of the negotiations on conventional armed forces in Europe of Vienna in 1989, the USSR wished to include land-based combat aircraft and maritime forces in the consideration of ground forces of both alliance. Not long into the negotiations, there were indications that hitherto intractable positions could be modified, and that both sides had come to realize that the residual impact of airpower, especially after ground force reductions, would be so great that it could not longer be ignored. A reduction in the numerical superiority in aircraft and bases of the Warsaw Treaty Organization would not only enhanced western security, but would also lead directly to greater mutual, co-operative security and stability in Europe.


Negotiations between NATO and the Warsaw Pact on reducing conventional armed force in Europe (CFE) opened in Vienna in March 1989. An agreement providing for massive reduction of Warsaw Pact ground force armaments appears feasible within the next two to three years. With more agreement within NATO on long term aims of the reduction process on some concept of an east-west security system for all of Europe, it will be possible to move more smoothly to an early first agreement in the CFE talks, and beyond that a
second successful stage of negotiations on deep cuts in the force of both alliances.


Emerging technologies are seen as a means of ameliorating many of western Europe's security problems little thought has been given to the implications of these development of the prospects for conventional arms control however. An analysis is offered of the nature of these new technologies and their linkages with changing Soviet and NATO military doctrines, nuclear deterrence and nuclear disarmament. The problems of negotiating global conventional arms limitations are then discussed and the impact of emerging technologies upon them.


Reaching conventional arms stability in Europe is likely to be a long and difficult process. Although Western concerns are focused on the possibilities of arms reductions, there is room for an expanded set of confidence and security building measures. One of the most important tasks that will face Alliance members during the period of
negotiations will be their continued support of forward
defense and Flexible Response. The political and military
realities that demand the ability to defend along the NATO-
Pact boundaries will be as important after an agreement is
reached as they are before.

   Arms Control. 2, 3; 1981, Dec; 284-312.

   Explains the problems of conventional arms control
   in Europe. The nature of arms stability is held to stream
   from the general nature of East-West relations; the
deterrent functions of conventional forces are emphasised.
The nature of regional arms control, by contrast, is held to
depend more upon intra-alliance considerations of interest
than upon consideration of East-West arms stability. An
examination of the record of negotiations in MBFR and on
CBNs is held to reveal an inapposite approach and structure;
directed towards creating a visible equality in the most
important measures of military power".

22. MOORE (James W). Estimation of optimum force size and
   force reduction potential in conventional arms reduction
   negotiations. Arms Control. 9, 2; 1988, Sept; 116-33.

   It has long been realized that arms control and
defense policies can not be pursued in isolation, close coordination and harmonization of these policies are essential to achieve stability in force-balances at the lowest levels possible without jeopardizing the requirement for a secure defense. In particular, proposals for force reduction in east-west conventional arms reductions negotiations must be consonent with the force requirement needed to preserve the security of the NATO region. By using the concept of force to space rations as a standard for sizing NATO defensive force, it is possible to estimate the force requirement of the alliance in the central region and to identify the force reduction potential from current force levels deployed in the NATO guidelines area.


The Middle-East along with South Asia has been the largest conventional arms market in the third world. Despite the Welter of evidence that supports the facts of arms trade being a retardant to economic and social development and the principal causative factor for inter-state tensions, the dividing line over whom to blame for this problem has never been bridged. There is now a need to create an arms control regime incorporating suppliers and users, that is equitable at the base, and most importantly offers a feeling of enhanced security through unanimously arrived decisions.
Traditional arms control measures will be inadequates for European security requirements in years ahead. There remains an important role for conventional arms control in Europe though they stretch previous nation of arms control and traditional understanding of security issues. Arms control measures must be constructed to mitigate, temper, and settle the conflict that threaten peace. A European conventional arms control agenda should seek to create measure for local and bilateral applications as well as and pan-European application.

Arms control agreements between North and South Korea would improve not only the stability of Korean peninsula, but that of the entire region. A stable, but pagile, security environment currently exists, which depends largely on the prominent role played by the US. With the end of the cold war, the US still has a part to play on the peninsula: promoting south Korean security by deterring the North from aggression. Thus arms control agreements should
be designed to help maintain a continuing US presence in Korea and reduce or eliminate threat from the North.

MUTUAL AND BALANCED FORCE REDUCTION


The mutual and balanced force reduction (MBFR) conference opened in Vienna in October 1973. Since that time despite considerable dialogue and proposal, there has been neither treaty nor substantive arms reductions in Europe. An analysis of MBFR proposals and East-West perceptions is followed by both statistical and strategic implication of proposed reduction. (MBFR) can be successful with some adjustment both to the negotiating strategy and to substantive proposal. Despite the greater public awareness of nuclear arms issues, conventional force reduction should be an issue of greater priority with in the contending government.

POLITICS, EUROPE


Progress has been made in the Vienna talks on conventional armed forces reduction in Europe (CFE) which has fueled enthusiasm for conventional arms control in
general. It is now widely assumed that the political will is available for a conventional arms reduction treaty. Much of the current optimism is based on the presumption that the USSR has decided to play a less overbearing role in eastern Europe, to abandon the brezhnev doctrine, and to reduce its garrison accordingly. Yet if this process takes much further, the basic political framework assumed by arms control will no longer obtain.


For the first time in the post war period, negotiated reductions of conventional forces in Europe have emerged in public discourse as a real possibility. The most pertinent question for NATO in any possible scenario would be whether unilateral soviet withdrawals reduced Soviet military capabilities concerning Western Europe, not have such cuts improved the East-West political climate. The NATO alliance's most urgent task is modernizing the aging US nuclear weapons in Europe in a way that ensures the vitality of Extended Deterrence and Flexibles Response until the end of the century and beyond.

29. BORAWSKI (John). Toward Conventional stability in

Despite the profound uncertainties surrounding the prospects for conventional arms control in Europe, an opportunity has emerged for a fresh examination of this neglected dimension of European security. The economic demographic and political pressures in both east and west for negotiated conventional arms control arrangement are very real. Although the outcome of conventional stability talks probably will not be known for many years, it is vital at this early stage that more attention be paid to the types of conventional arms control outcome NATO should be seeking.


The changing political environment toward conventional arms control has necessitated a review of past proposals to develop a new conceptual framework. Drawing upon recent works on conventional arms control, a pattern of Soviet and Western objectives can be observed, including the various biases which each side brings to the negotiations. Models analyzing the force balance can also suggest a definition for stability in the European theater and how this might best be achieved. However, without a proper framework, arms control proposals are made in isolation from the
rest of security environment and therefore threaten to undermine, rather than increase, East-West stability.


The soviet, through general secretary and president Mikhail Gorbachev, have made what appears to be unprecedented concessions on arms control and conventional force issue. Far these initiative legitimate expressions of "new thinking" or are they simply steps carefully designed to obtain a "breathing space" for soviet strategists to implement qualitative changes to their doctrine and force structure? The soviets have already mounted a sophisticated and well integrate campaign to reshape the international security system to soviet advantage.

32. ALLISON (Roy). Current Soviet views on conventional arms control in Europe. Arms Control. 9, 2; 1988, Sept; 134-69.

New soviet initiatives on conventional arms control in 1986-87 were accompanied by a gradual soviet acceptance of the existence of asymmetries in the conventional balance. "Reasonable sufficiency" and "defensive defence" have
emerged as key concepts in an interval soviet civilian-military debate on necessary force levels. A close examination of Soviet debate over unilateral force reductions before autumn 1988 and an identification of the benefits the USSR could derive unilateral action suggests the likelihood of a soviet initiative along these lines regardless of Soviet commitment to new multilateral conventional arms negotiations.

____, USSR-WEST


As the west enters the new phase of conventional arms control it will have to reconcile its activities in three complex areas: the preservation and, possibly, restructuring of the nuclear prerequisites for conventional arms control: the persuit of conventional arm control proper starting with a debate on military doctrine and confidence-building measures; and, the improvement of its own force, structural and internal alliances arrangements. Western policy should engage reform and change of military policies in the USSR. But western concessions can only come as a consequence of significant soviet moves.

____, DEFENCE POLICY, ABM, 1980's

34. BURT (Richard). Relevance of arms in the 1980's. Dardalus. 101, 1; 1981; 159-77.
Although it has become conventional wisdom that arms control considerations should be taken into account in shaping defense policy and programs, little thought is given to how existing negotiations should be adapted to changing military realities. The possibility of revising arms control arrangements to bring them more into line with emerging realities should to be overlooked in the next few years. Revision of the ABM treaty to facilitate the deployment of hard-site missiles is an interesting option.

35. BURNS (Richard D). Arms control and disarmament: terms and resources. Peace and Change. 8, 1; 1982; 53-63.

Arms control techniques are divided into six categories: (1) limitation and reduction of weapons; (2) demilitarization, denuclearization and neutralization; (3) arms manufacture and traffic; (4) Outlawing specific weapons; (5) rules of war; (6) Stabilizing international environment. Methods of achieving arms control are defined as: (1) retributive measures; (2) unilateral measures; and (3) reciprocal measures.

36. FORSBERG (Randal). Confining the military to defence as a route to disarmament. World Policy Journal. 1, 2; 1984; 285-318.
In order to achieve a stable disarmed peace, the requirements for armed forces must be eliminated by ending the popular acceptance of certain functions of military force and by transforming other functions so that they can be fulfilled by non-military institutions. The only way to do this is to constrain the functions of armed forces gradually, eliminating the need for some first while allowing others to persist longer. If military force were maintained strictly for national defence people would over time begin to believe that atavistic, war-making tendencies would not resurface.

COOPERATION


For years the multilateral arm control process (e.g. the UN, the conference of disarmament in Geneva, the conference on security and cooperation in Europe) has provided an extravagant, self perpetuating, irresponsible gabfest for the benefit of the professional arm-controllers. However, the process has promoted ideas harmful to western security: that wars arise principally from miscalculation and misperception: that arms, not aggressive regimes, cause wars, that nuclear weapons, not totalitarianism, are the chief threat in the world today; that "the superpowers" are morally equivalent; that force can be eliminated from international relations.
Soviet-American disarmament negotiations of the mid-1950s provide a critical case for evaluating theories of cooperation such as Tit for Tat and GRIT. Although both sides were close to agreement on the main term of a treaty by May 1955, the negotiations were ultimately unsuccessful. On the basis of declassified US documents, it now appears that the US did not favor an agreement at the time: Thus the game was not Prisoner's Dilemma, but deadlock. The case reinforces the criticism of Tit for Tat that its unitary actor assumption ignores domestic second-image pressures for arming. The importance of understanding the link between internal political coalitio and external bargaining strategies is emphasized.

Domestic public opinion should be strengthened and mobilized in order to counteract the international armament dynamic and those national interest group which support arms buildup. This is a level on which disarmament processes should be generated in the light of the growing despiration
of political power both internally and internationally. If it had not been for the strong citizen's movement in Europe. The beginning of disarmament talks would have been much delayed.

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During the 1970s Czechoslovakia was made systematic efforts designed to contribute to the attainment of a more secure and socially equitable world. Although Czechoslovakia does not possess nuclear weapon and does not have such weapon deployed on its territory, it is virtually interested in the proceeding and result of negotiations having the objective of limiting the stockpiling of lethal weapons and their proliferation.

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A centrally planned socialist economy is no more and no less able to overside the negative economic effects of military spending than a capitalist economy. The only way to redevelop an economy severely stressed by the burden of
military spending is to rechannel resources back into productive civilian activity. The economic damage being done to both the US and soviet economics by the continued escalation of the arms race is cumulative.

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HUMAN RIGHTS


At least six perspectives or theories can be distinguished between disarmament and human rights and is restricted to the European setting. (1) Disarmament is a condition of human rights. (2) Human rights are a condition of disarmament. (3) Disarmament is an obstacle to human rights. (4) Armaments are a defense of human rights. (5) Insistence on disarmament is an obstacle to human rights. (6) A dialectical relationship exists between disarmament and the promotion of human rights.

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relation to ECONOMIC DEVELOPMENT, CHINA


Chinese defense strategy is gradually shifting away from relying as sheer weight of number to emphasizing the need for a more technological, mobile, three dimensional and
machine oriented posture. This reflects changing threat perceptions. For as the country modernizes, its security interests will become increasingly regional, whether in defending sealanes, offshore resources, and contested islands or protecting allied states from Soviet and other third power - mainly Indian and Vietnamese influence. While it is difficult to isolate and measure the impact of military reduction process on development, especially when many of the measures have yet to take noticeable effect, it can already be seen to have made important contributions to the overall economy.

WAR-NUCLEAR


At the size of the current nuclear arsenals any nuclear attack involving the superpowers most likely would lead to an uncontrollable large scale nuclear war. The immediate human toll of this war surpass one billion of deaths and one billion of injured. It claims diseases after war on global scale. Nuclear deterrence, either in the form of mutually assured destruction or of limited nuclear war, cannot preclude the likelihood of a full-scale nuclear war. Nuclear disarmament and the establishment of deterrence at a level of conventional arms is better option than nuclear deterrence and SDI. This option can be realised if both superpowers have the will to pursue it.

There is a need for some practical expression of the benefits which can accrue by linking disarmament with development. The establishment of an International Disarmament Fund for Development would help to institutionalize creative forms of interdependence between developed and developing countries. The establishment of the fund would be a political act which cannot be imposed on the international community. The requirement of practicality should take precedence over ideal principles of equity.


To carry out general and complete disarmament, the world needs a convincing plan for the post-disarmament international system so that disarmament does not give rise to new anxieties. The world needs institutives for maintaining peace and settling internationals disputes by peaceful means - a world government. One step towards such a govt. world be for nations to amend their constitutions to contain passage renouncing the possessions of weapons and
waging of war. The preamble of Japan's constitution and Article I provide a vision for the world after general and complete disarmament.

KOREA

47. LEE (Ki-taik). Disarmament on the Korean Peninsula and the position of the four major powers. Korea Journal. 30, 4; 1990, Apr; 21-38.

The purpose of this thesis is (1) to discuss disarmament on the Korean peninsula and the problems it entails; (2) to examine the position and reaction of the four major powers arms reduction or arms control on the Korean peninsula can be approached with two conceptual framework: involuntary and voluntary disarmament. With the military environment on the Korean peninsula, the changing position of the US the USSR, China and Japan and regard to the arms reductions issue are discussed. They have adopted policies based on a military balance and arms control approach. An involuntary approach in reducing tension and controlling arms on the peninsula is viewed to be more effective than a voluntary approach.

MILITARY

48. TOWLE (Philip). Disarmament and military decline. Arms Control. 1, 1; 1980, May; 64-75.

The weaker a declining power is, the more it needs an
agreement to prevent other states from increasing their forces. But the weaker it is, the less it has offer in any bargain. The more anxious it appears to be to reach an agreement, the greater the chance that its rivals will prefer an arms are to a limitation of their forces. The discrepancy between a country apparent military power and its status enshrined in an arms control treaty cannot usually, therefore become too wide.

___, ___ NAM, viewpoint

49. PRASAD (Jayant). Non-aligned view of disarmament. IDSA Journal. 1691; 1984, July-Sep; 77-94.

Disarmament has been one of the most important concerns of the Nonaligned Movement since the time of its inceptions. This concern was nurtured by the historical experience of the non-aligned countries whose endeavour has been to guard their newly won independence and remain outside the spheres of influence of the great powers. During the successive summit meetings over the years they have shown progressive sophistication in dealing with specific disarmament issues. Despite various inherent, limitations, they have constructively contributed to the disarmament debate through mediation between the two super power, shaping the consensus in multilateral fora including the general assembly and the conference on disarmament and making people conscious of the threat of nuclear holocaust in an over-armed world. The Non-aligned movement has thus
become history's biggest peace movement.

___,___, NATO, in relation to USSR

50. PASTUSIAK (Longin). Disarmament, arms control and East-West relation. Polish Round Table. 9; 1979; 183-94.

A policy of coexistence among power in the area of nuclear policy is taking shape. However, the increased sending on the part of NATO countries does not facilitate arms control negotiation the abandoning by the US of the basic goal of maintaining strategic supremacy over the USSR allowed for concluding many new agreement which limit the danger of nuclear war. In general, the question of detent between east and west is not at all theoretical, but of great practical importance.

___,___, NUCLEAR WEAPONS, INF-TREATIES influence on ECONOMY


With reference to the INF treaty the question arises as to whether the removal of a specific range of weapon systems will be expected to increase or reduce the budgetary costs of defence. An analysis of the costs of disarmament treaties is illustrated. On the one hand, disarmament treaties may constrain the adoption of the most cost effective combination of weapon and thereby increase the
costs of providing particular levels of defense capability. On the other hand, if the treaty also constrains a potential adversary, the desired level of defense capability may be reduced. As the treaty increases the price of defense capability, the price elasticity of demand for defense and the interdependence between signatory countries are both important considerations.

52. BARANOVSKY (Vladimir). Perspectives of disarmament and detente in Europe after the INF Treaty, Peace and the Sciences, 1989; 1; 1-9.

The INF treaty is an event of great significance for the evolution of disarmament and detente in Europe because it goes beyond simply imposing rules on the arms race and eliminates a whole category of weapons. Moreover the treaty provides a positive model for further progress in disarmament negotiations and helps create the conditions necessary for rethinking the future of peace, security and development in the "Common European Home".


Social movement organizations (SMOs) devote considerable efforts to constructing particular version of
reality, developing and espousing alternative visions, and attempting to affect various audiences interpretation. Conflicts regarding such interpretive matters, referred to as "frame disputes" are ubiquitous within movements. Using a multimethod strategy, this study analyzes the dynamics of interorganizational frame disputes within the nuclear disarmament movement including their organizational and ideological contexts, conditions conducive to their emergence, patterns observed, and their effects.

COUNTRIES

54. SMITH (Chris). Disarmament, peace movement and the third world, Third World Quarterly. 6, 4; 1984, Oct; 892, 910.

To suggest that the paucity of disarmament groups in the third world denotes the non-existence of a peace movement is far from correct. Where a peace movement can be identified in the struggle for a series of basic demand arising from the condition of underdevelopment - self-determination, civil and human right ecocide, militarism, human and cultural survival. In addition, there are indications that a concern about the issue of disarmament exists on a popular level.

FOREIGN POLICY, POLAND

55. MULTAN (Wajcieh). Disarmament issues in the foreign policy of People's Poland. International Relations (Warsaw). 1, 4; 1984; 69-86.
The phase of Polish international activity in questions of disarmament generally correspond to the phase of Polish foreign policy in the post-war period. Polish disarmament efforts were largely determined by the international situation and were particularly contingent on East-West relations, armaments policies of NATO states, notably the US and the FRG; and the socio-political situation in Poland. A survey of documentation of CSCE negotiations shows that Polish diplomacy made good use of these platform to advance Poland's national interest and the interest of the whole socialist community, including it calls for universal and complete disarmament.

____, PROBLEMS

56. FORSBERG (Randall). Obstacles to a stable disarmed peace: and how to set our priorities to overcome them. Bulletin of Peace Proposals. 15, 4; 1984; 333-39.

Past disarmament efforts have failed because they have given too little weight to the role of nuclear weapons in influencing the use of conventional forces. They have made no attempt to end the US of conventional forces as a tool of policy, and they have overlooked the fear of dismantling the weapon industries. US conventional forces have been besigned and used in a more interventionist manner than those of the USSR although arms debate in the west has incorrectly assumed that the US maintains military forces only for defence.
Meeting in Madrid, the 35 participants in the conference on security and cooperation in Europe reviewed implementation of the Helsinki Final Act. At the river they mandated the Stockholm conference on disarmament in Europe (CDE) first proposed by France in 1978. In the face of strong opposition from the Warsaw Pact countries, the western nations remained unusually united in demanding important changes in the nature of the confidence building measures to be negotiated at the CDE. Unity was essential to the West's ability to pass the CDE proposal in much the form they wanted. Various western participants had differing perspectives on the objectives of a CDE which led them to adopt different approaches to dealing with the French CDE proposal.

The developing countries should adopt a strategy of non-confrontationist resistance to the industrial and heavily armed powers to bring about disarmament.
There has been a gradual decline of superpower naval competition in the late 1980s. Despite the absence of any form of naval arms control, economic and political constraints have forced both the US and Soviet navies to change their leadership, trim their budgets, curtail operations overseas, and re-evaluate their fundamental purposes. Yet unless the two governments agree to limits on their naval forces, each will continue to build deploy naval weapons and vessels that the other finds threatening. More important unless the US reconsiders its opposition to naval arms control it will miss a critical opportunity to bring stability to the high seas and eliminate a troublesome category of nuclear weapons, tactical naval nuclear weapons.

Michail Gorbachev's disarmament proposals are part of a broader foreign policy campaign and a "new thinking" about international security. In order to reverse the Brezhnev legacy of a stagnating economy and a deteriorating foreign policy position, the new leadership has been willing to sacrifice previously perceived military requirement for the sake of political and economic benefit. Gorbachev
prefered outcome would be comprehensive arms control agreement alongs the lines laid out in his January 1986 speech, although he has shown considerable flexibility in a number of its components. His goal include preventing an arms race in space and achieving US participation in a nuclear test moratorium that the Soviet have mentioned unilaterally since August 1985. The unwillingness of the Reagan administration to pursue these objectives means that it is now up to the US congress to maintain restraints on the arms race through tacit cooperation with the Soviet.


American ideas had considerable influence on Indian political process and national security thinking. Such influence is seen in the constitutional provisions relating to fundamental right's, pressure groups with reference to environmental protection, civil liberties and anti- advocated creation of a national security council on the American model. Similarly, public funding of election's is advocated. While any innovative new idea can be borrowed, the notion that all American ideas are impracticable need to be given up.
Export controls are used increasingly by individualized countries to prevent nuclear and missiles proliferation in the developing world. This is not likely to be effective against the background of breakdown of former soviet arsenals, the efforts of China to earn hard currency and the growing commercial and technological competition amongs the industrialized countries, as demonstrated by illegal exports to Iraq, Pakistan and South-Africa. A more effective method is to have a treaty in addition to NPT.

Explains the conditions under which a supplier can develop structural and decisional influence over a recipient. The US attempts at influencing Pakistan, especially its nuclear weapons decisions, during 1979-91. It period are examined. It concludes that the success rate of influence attempts has been mixed as Pakistan often succeeded in reversely influencing the US to receive better weapons systems, largely due to the structural conflict that Washington was engaging with the USSR in Afghanistan.
For American arms control negotiators and their subsequent judgement about Soviet compliance behaviour, in particular during periods of leadership succession the manner in which the USSR organizes itself to conduct the business of arms control is of great importance. It is necessary to examine and draw some general propositions about the bureaucratic politics and organizational routines followed by the Soviet communist party, the military and the strategic forces research and development infrastructure.

Hedley Bull, author of the control of the Arms Race, linked arms control to international society. He saw the danger that arms control processes would increasingly work to support narrow particular interests of international society, as a whole. The prospects of arms control in post-cold war era are likely to be enhanced if it is seen as process aimed at sustaining and strengthening international society rather than simply being an aspect of national
security strategies of individual powers. An arms control policy for the post cold war period must be part of a wider set of policy priorities, which includes a commitment to a more equal distribution of resources and power in international society.

_____ , ISRAEL


There are sign of change in the traditional negative evaluation of arms control as a device for enhancing security in Israel's academic community as well as in its foreign affairs and defense establishments. The willingness to consider arms control more carefully is the result of the changing role of the US in the international system; the greater acceptance of the Jewish state in the middle-east and the ensuing peace process; and new Israeli perceptions as to the limitation on the utility of available unilateral means for providing national security.

_____ , NATO, ALLIANCE


The western alliance will have an important role to play in the comming years, despite arguments that the end
of the cold war is the time to dissolve the European alliances. Military forces will be a smaller part of overall security, but they will not become altogether irrelevant. Efficient military planning and arms control remain goals of western states, and NATO facilitates both. Consideration of NATO's past performance coordinating arms control positions together with present arms control reduction aims shows that NATO remains well-designed for such tasks in the foreseeable future. If, in the more distant future several key condition are met, western security will be most effectively pursued without NATO.

___, NEGOTIATIONS

68. NEILD (Robert). Case against arms negotiations and for a reconsideration of strategy. Arms Control. 7, 2; 1986, Sep; 133-55.

Negotiations over arms levels presuppose that Balance in arms is needed for security and is attainable. Both presumption are wrong. If political objectives are peaceful the rational requirement for nuclear forces is sufficiency; and for nuclear forces, where there is some choice between defensive and offensive forces, the rational requirement is defensive superiority. To attain these, independant action by each side and cooperative dialogue between them are the prime avanues of circumstances, the nature of which is also cursed.
If arms control negotiations between the super power are to be successful they must be restructured and placed in a wider context. Hierarchy of negotiations on strategic stability and ending with talks on conventional forces, the conventional aspect should be the starting point. Moreover, it is necessary to place arms control negotiations in the context of greater interchange in other fields, to help alleviate the distrust which has resulted in past failure to achieve agreement between the superpower.

On all accounts, Pakistan's pursuit of nuclear weapon capability is now irreversible; not even the US can deter her. Hence, India must take appropriate counter measures including a matching nuclear response, to safeguard herself. Since neither country is willing or in a position to abandon its nuclear option, the only save course left is to shun a strike at each others nuclear facilities and live in mutual nuclear deterrence. Tis could extend to be deterrence of a conventional war as well, thus serving the cause of peace even if somewhat diabolically. Accordingly, despite the ongoing mutual mistrust, the Indo-Pak accord arrived at on
17 December 1985 could be regarded as the second block for building peace on the sub-continent, the Simla Agreement of 1972 being the first.


Against a back drop of strategic interests that appear to override US concern about Pakistan's nuclear path, both India and Pakistan seem destined to engage in a nuclear arms race. The social and economic costs to both countries are obvious enough, but the greatest danger lies in a possible regional blowup also involving the superpower. There is not much hope of a bilateral or international non-proliferation solution the only hope for nuclear restraint lies in a voluntary freeze by both India and Pakistan on this weapons oriented programs wherever possible. At the same time, there is a great need to disengage the Indo-US relationship from its Pakistani shadow.

72. GHOSH (SK). India's nuclear programme. IDSA Journal. 17, 2; 1984, Oct-Dec; 205-12.

India has growing technical manpower base in the form of scientists, engineers, and technologists as well as a sound industrial base. Since it has not surrendered its
nuclear option, the sooner a beginning is made to utilize the spin-off benefits of nuclear and space technologies for the purpose of defense the better. In any case, greater coordination among the Department of Atomic energy, the Indian space research organization, the electronics commission and the Defence research and development organization is essential. The coordination should be maximum since it will keep the nation ready and vigilant and will not put the country in a tight corner as and when the necessity for resisting the nuclear option arises.

__, NUCLEAR WEAPONS

73. BAILEY (Sydney D). Paradoxes and predicaments of nuclear weapons. The World Today. 37, 1; 1981, Jan; 1-7.

In the first two decades of the nuclear era, it was believed that a major barrier to escalation was the firebreak between conventional and nuclear weapons. This has now been eroded by the development of battlefield and tactical or theatre nuclear weapons. The weapons continuum is intended to enhance deterrence, but it facilitates escalation in war fighting if deterrence fails. If deterrence fails it will be due to part to the increasingly cataclysmic nature of modern weapons.

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Deterrence requires that a potential opponent be convinced that the problems, risks and costs of aggression for outweigh the gains he might hope to achieve, deterrence can function effectively is one has the ability, through defence and other military means, to deny the attacker the gains he might otherwise have to reevaluate. The deterrent balance must be shifted from one which is based primarily on the punitive threat of devastating nuclear retaliation to one in which nuclear arms are greatly reduced on both sides and non-nuclear defences play a greater and greater role.


Nuclear winter remains as great a danger as ever. Deterrence by threat and not immunity from attack will have to remain the fundamental ultimate instrument of strategy. The capacity for flexibility can offer at least a theoretical possibility of avoiding ultimate escalation without conceding defeat. Some control but with necessary nuclear modernization and conventional defence programs as well.

Our predicament stems from the fact that the nuclear powers have implanted a nuclear doomsday machine on our globe. Not only are they reluctant to dismantle it: on the contrary, driven by fierce rivalry and the technological momentum, they are feverishly engaged in building up nuclear stockpiles still more. The operational imperatives of military R & D act to perpetuate the arms race projecting it far into the future. In conditions of a permanent revolution in military technology, nuclear deterrence evolved towards nuclear war-fighting. A change of direction is imperative, away from the exclusive focus of military hardware, and toward a broader vision encompassing human development and cooperation as integral parts of international peace and security.

77. LIBERMAN (Peter J) and THOMASON (Neil R.). No first use unknowable. Foreign Policy. 64, 1986; 17-36.

No first use might lower the probability of going nuclear as it raises the probability of attack. Since noone can know whether fiddling with the first use doctrine will improve West European and US security, the west should pursue the more difficult but more useful avenue of arms control. Bilateral reduction in conventional and nuclear forces in Europe, combine with a shift, toward unambiguously defensive posture would decrease the risk of conventional
war and nuclear war, plussave money and personnel. The Regan administration will clearly not adopt no first use. After the 1988 election, the new administration would devote an enormous efforts to instituting a no-first use policy.

____, ____ BARRIERS

78. NELSON (Linden) and BEARDSLEY (George L.Jr.). Toward an interdisciplinary model of barriers to nuclear arms control. Social Science Journal. 24, 4; 1987; 375-88.

The nuclear arm race is a powerful phenomenon with political, technical, historical, economic, and psychological dimensions. Most analyzes concentrate on the political, technical, or historical dimensions to the neglect of the economic and psychological. This article seeks to correct this neglect, arguing that serious barriers to arm control arise from economic and psychological forces.

____, ____ DEVELOPMENT, NEGOTIATIONS, GENEVA

79. BARNABY (Frank) and WINDASS (Stan). Nuclear weapon development and the Geneva talks. Yearbook of World Affairs. 38; 1984; 277-94.

The idea that a balance of nuclear war fighting capability could provide any kind of security is illusory. The idea that such a capability on either side could be ratified by treaty is bizarre in the extreme. The danger is not so much in the reality as in the perception of a nuclear
war winning and first-strike capability: and this perception is increasing. It is no longer possible to depend on the idea of balanced threat and counter-threat at every level as a possible basis for security or for arms control.

... DIPLOMACY, INDIA-PAKISTAN, 1980's


Regional nuclear diplomacy in South Asia primarily originates from the interaction of the nuclear policies of India, Pakistan and the five nuclear weapons states. The Indian policy towards every meaningful nuclear arms control and disarmament solution in the 1980's reflected an inextricable linkage to its claim for general and complete nuclear disarmament; however, because of the exclusiveness of general and complete disarmament as an attainable objective, India has been able to maintain a doctrine of nuclear ambiguity rejecting all of Pakistan; bilateral initiatives aimed at regional non-proliferation. India's covert nuclearization is gradually advancing under this doctrine of nuclear ambiguity.

... DISARMAMENT


The decision of President George Bush in Sept 1991 to withdraw naval tactical nuclear weapons, including nuclear
cruise missiles, from vessels at sea was a recognition that such weapons have no clear role. Britain and USSR/Russia reciprocated with similar naval nuclear disarmament decisions. Unilateralism promises to avoid the difficult issue of verification which could have prevented the accomplishment of an arms control treaty. However, important political goals would be served by a verification regime for naval systems. These include hampering any future efforts to reverse unilateral disarmament, developing confidence building measures and co-operating in the disposal of nuclear weapons.


Enumerates the nuclear deterrence is responsible for the fact that there have been no world war for nearly four decades. This lack of a world war is not due to disarmament of either a multilateral or unilateral nature. There are no easy answer to the increasingly technical and complex arms control negotiations. Short of a major change in the state of East-West political relations. The maintenance of the present balance of terror is as much as can be realistically expected.
BARRIERS


The acute problem with respect to nuclear weapons is not their existence, but their numbers. Six strategic and psychological difficulties inherent in current solutions to this problem are examined followed by a new and somewhat different proposal. The new proposal consist of a 10 year, bilateral agreement between the US and the USSR coupled with a multilateral endorsement of the agreement open to all other countries. In the concluding section, a series of potential objection to the new proposal are raised and briefly discussed.

influence of SPACE TECHNOLOGY


Today's nuclear abolitionists will have trouble advancing their program of disarmament until some alternative system for ensuring security and resolving disputes has been pioneered. Because the cooperative development of space technology efforts the opportunity to rechannel the momentum of the arms race and to create at least an experimental working peace system, it deserves a central place in contemporary peace and security strategy.

The Geneva conference on Disarmament is an excellent international structure with all the necessary attributes for the processes of reciprocal evaluation of military balances, for adjusting contemporary strategical doctrine and for establishing real communication links regarding the intentions and capabilities of all parties involved. However, the trends in the development of the arms race bear evidence to the fact that the strategy of nuclear deterrence cannot be a stabilizing factor in international relations and that it fails to ensure the security of states.


Every British government since 1945 has held fast to the idea that the country should retain an independent nuclear deterrent albeit one closely linked to US nuclear strategy. Since the late 1950s the campaign for nuclear disarmament (CND) has sought to reverse this policy. In the 1960s the CND mobilized 100,000 people, but entered decline in the 1970s. Revived today, it has almost 100,000 members and has mobilized a quarter of a million supporters for mass
demonstration, since its renaissance after 1979 it is very visible in the national media and it help to make nuclear disarmament the most prominent feature of the 1983 general election.

**role of AUSTRALIA**

88. BUTLER (Richard). Nuclear disarmament: does Australia have a role? *Australian quarterly*. 59, 1; 1987; 91-7.

Australia has sought and obtained leadership on major nuclear issues and acted independently on the basis of a clearly defined policy. It has influenced nuclear weapons states and some other key non-aligned states. It has played a major role in defending and strengthening the non-proliferation treaty (NPT), there have been new and creative approaches in order to break existing deadlocks Australia has been prepared to differ with major nuclear powers, including with its alliance partner, when the pursuit of disarmament policies required this.

**UK**

89. FREEDMAN (Lawrence). Britain: The first ex-nuclear power? *International security*. 6, 2; 1981; 80-104.

In the even that a government should come to power in Britain committed to unilateral nuclear disarmament, there would be difficulties in effecting the policy. It is important to recognize that the choice of the next British
government will be based for more on economic policy than defense policy. Britain is still far from turning itself into an ex-nuclear power in the full meaning of the term, or even with reference to some national capacity for strategic deterrence.

90. KEOHANE (Dan). British approaches to nuclear arms control and disarmament. *Arms Control*. 6, 1; 1985, May; 58-81.

This article explores three separate but related issue by reference to the current declared security policies of the major British political groups, namely the conservative party. The labour party and the social democratic/liberal alliance. (1) It delineates the views of multilateralists (i.e. the conservative party, the social democratic party, the leadership of the liberal party and a few senior labour party figures) and nuclear abolitionists (i.e. the labour party) regarding the political-diplomatic and military utility of nuclear weapon and the risks attached to reliance upon such arms. (2) The article explores how multilateralists and nuclear abolitionists judge East-West negotiations for the control and reduction of nuclear arms and it outlines the course each prescribes for such talks. (3) The cogency and consistency of the two approaches are examined.

The paper examines possibilities for verified disarmament and elimination of nuclear warheads as called for by possible future nuclear disarmament treaties. The principal focus here is on procedures to verify that warheads specified by treaty for elimination are, in fact, completely dismantled, their components rendered useless for construction of new warheads, and the contained fissile materials placed under international safeguards or disposed of in such a manner as to make them unusable in weapon.


Conclusion of the intermediate range nuclear forces (INF) treaty may well lead to completion of an agreement on reductions of US and Soviet strategic nuclear weapons, though probably in the succeeding US administrations. In the longer run, the military confrontation in Europe seems as likely to shrink through independent actions on both sides taken to rationalize forces and to cope with economic stringencies as it is through agreed reductions. Not only the political confrontation in Europe, but the military
confrontation too appears to have peaked. NATO government need to make a serious effort to achieve agreement with the warsaw pact on negotiated force reductions.

___,___, FREEZE


Evaluates that an emerging imbalance of military power the danger of nuclear war is growing. Those who advocate a nuclear freeze are making more likely the very thing they wish to prevent. The alternative of American rearmament is not an end to the arms race, but rather a one-sided arms race. A policy of sure and steady deterrence offers the best hope for keeping the world safe from nuclear war. Deterrence can be reassured by determined American action to restore a stable balance of forces.

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94. SIGAL (Leon V). Warming to the freeze. Foreign Policy. 48; 1982; 54-65.

Stability is the measure of arms control. It takes three forms: strategic stability, crisis stability, and arms race stability. The conditions for strategic stability are presently met. A detailed examination of present and prospective weapons developments indicates that a freeze an deployment would have marginal effect on strategic
stability, not all of the positive. A freeze would halt a number of weapons programs which threaten crisis stability; at the same time it would perpetuate the present instability resulting from growing ICBM vulnerability. It would also damp dawn arms race instability somewhat.

95. TYGART (C.E). Participants in the nuclear weapons freeze movement. Social Science Journal. 24, 4; 1987; 393-402.

Explanation of why people participate in social movement are usually adhoc combinations of ideology, social support and ecological factors. This survey of californians active in the nuclear freeze movement found that rather than structural isolation, as suggested by collective behaviour tradition, the participants displayed link to democratic party organizations and the previous anti-Vietnam war movement. At least some social movement may become institutionalized to the degree that paradigms from areas such as political sociology of institution of needed social movement may have evolved beyond their earlier collective behaviour origins.

96. MILBURN (Michael A), WATANABE (Paul Y) and KRAMER (Bernard M). Nature and source of [US] attitudes toward

Result from a 1984 survey of Massachusetts adults demonstrate that support for a nuclear freeze is consistently high across different political and social groups. Uncommonly broad concurrence exists in spite of Presidential opposition to the proposal. Analysis of respondents' explanations for their opinions about a freeze reveals that fear about nuclear war underlies public approval of a nuclear freeze. A key factor cited by respondents for greater worry about the possibility of nuclear war is increased media attention to nuclear issues.

97. WHITE (Michael J) and FESHBACH (Seymour). Who in middle town supports a nuclear freeze? *Political Psychology*. 8, 2; 1987, Jun; 201-9.

Public support for a mutual and verifiable nuclear freeze was examined among 251 adult residents of a mid-western city. During a telephone interview respondents answered questions regarding their attitudes toward the Soviet Union, national defense, and nuclear disarmament. Marginal percentages were similar to those found in national surveys and suggest that supporters and non-supporters of nuclear freeze proposal differ on several variables. We argue that the conflict between anxieties concerning nuclear
warfare and desires for an effective national defense posed a significant dilemma for respondent, resulting in considerable overlap in positions held by the two groups.


A consideration of the adequacy with which a nuclear freeze could be verified indicates that such a freeze would sharply constrain US flexibility and could reduce US capacity for prompt, counter vailing military response to evidence of a violation. To the extent that the freeze loses purity and comprehensiveness because of partial considerations, it becomes much like any other arms control proposal from the point of view of monitoring and verification. Definative judgement about monitoring and verification capabilities require detailed analysis of classified information.


Military modernization, China's relation with South Asian states, the boundary problem and the Chinese nuclear explosion in May 1992 coinciding with the Indian President's
visit have all had a negative effect on relations with India. Only the smooth management of a boundary problem proved to be positive. The question is whether Indian diplomacy can counter Chinese influence in south-Asia and still continue to have cordial relation with China.


India and Pakistan now openly acknowledge that they have nuclear weapon capabilities, although neither admits to producing any nuclear bombs. The nuclear programs in India and Pakistan are driven by powerful political, military and bureaucratic forces that use nationalism as their main incentive. Their march towards building nuclear weapons, it is conceivable that India and Pakistan may never openly produce or deploy nuclear arms, nor nuclearize their missiles. Domestic budgetary constraints and civil unrest external economic and political pressure could counter-act pro-nuclear forces. The international community should place more emphasis on non-proliferation policies.


Although public debate does not precede or greatly
influence a government's nuclear policy, there has been in
India considerable public debate on India's nuclear dilemma
to go in for the bomb or not. Pakistan's frantic effort to
make the bomb and the support she is receiving in this
regard overtly and covertly from some big powers like the US
and China seem to have strengthened the plea of the bomb
lobby that India should make the bomb and avert the looming
nuclear asymmetry in the sub-continent, yet India should not
emulate Pakistan in this regard. It requires courage to take
the decision to make the bomb. Certainly greater courage
particularly moral, to keep away from the hazardous and
endless path of nuclear weaponry.

102. RITCHESON (Philip L). Nuclearization in South Asia.
Strategic Review. 21, 4; 1993; 39-47.

Proliferation of weapons of man destruction (nuclear,
biological and chemical) and the means to deliver them has
become a primary threat to many nations. In South Asia,
however proliferation has already taken place. The greater
problem in this region is nuclearization. Additionally, new
geopolitical and geostrategic realities, e.g. the remergerence
of central Asia, actually provide greater incentives at a
minimum, for India and Pakistan to retain their nuclear
programs, if not actually expand them.
In the mid-1980s, the strategic environment of South Asia displays a markedly different character from that prevailing in the seventies. At that time, largely as a result of the Bangladesh war, India's credentials as the dominant power in the region had been clearly established. Today, the presence of thousands of Soviet military troops in Afghanistan as well as the upgrading of American naval facilities on the island of Diego Garcia in the Indian Ocean raises the probability for super power interventions in the region. Furthermore, the proximity of the South Asia region to South-West Asia may cause the tensions there to have their spillover into the former. Added to this is the nuclear factor, one that has assumed some degree of importance, in view of the recent success that Pakistan has achieved in developing a nuclear weapon capability.

The newly-independent South Asian states, championing the cause of disarmament in the decade of 1950s, have now
taken up the issue of denuclearization of the Indian ocean specifically to save themselves from superpower's rivalry. Such efforts would bear fruits only if south asian states develop strong and viable power structures and institutions of regional cooperation which would eliminate the possibilities of superpowers intervention.


The problems surrounding the search for an INF arms control agreement are examined on the eve of the resumption of 45 Soviet arms control talks in January 1985. After examining the negotiating positions by both parties prior to the collapse of the original INF talks in November 1983, the prospects for a future agreement are discussed. An analysis of the conditions that might make such an agreement possible is offered, and the likely form of any agreement it assessed. Finally, the article aruges that it will be a continuing source of frustration for Europeans that options and policies concerning arms control that they consider to be fundamental to their security will continue to be determined by the state of the Soviet-American political relationship.
106. AUTON (Graeme P). European security and the INF dilemma: is there a better way? Arms Control. 5, 1; 1984, May; 3-53.

The NATO intermediate unclear forces decision should be seen as part of the perennial effort to sustain the validity of traditional Atlanticist concepts. The decision is mistaken, and involves high opportunity costs. By seeking to fuse strategic and theater was it ignores legitimate doubts about American commitment and fail to consider the growing incompatibility between a cataclysmic deterrence posture and the desire for a continued US nuclear guarantee.


The double zero intermediate nuclear forces agreements will reduce the credibility of NATO's deterrence in the eyes of the USSR, thus impacting adversely on Western security. The INF agreement will lead to the denuclearization of western Europe, which is what the USSR wants. It would make the region safe for Soviet conventional aggression or would result in the neutralization of western Europe from the threat of the conventional forces of the Warsaw pact. Even if the INF accord appears to be in the short-term interests of the US, the long term impact could be detrimental to the US.
Efforts to negotiate limits on nuclear forces in Europe are plagued by a set of recurrent problems. Equitable balance are difficult to negotiate when the forces in question are asymmetrical. A common bargaining strategy is difficult to forge in a hierarchical alliance, like NATO, that comprises at least seven different classes of states with respect to their nuclear capabilities, nuclear right, and nuclear obligations. Finally, bilateral efforts to control Soviet and American nuclear forces exacerbate the cycle of anxiety among dependent allies caught in the classic alliance security dilemma; between the fear of abandonment in a crisis and the fear of entrapment in a conflict not of one's own choosing.

The problem of whether to pursue arms control agreement regarding intercontinental nuclear force and those based in Europe independently or in concert is far from new. Historical experience suggest that the problem is a devil's
The SALT decade saw two balances - strategic and European - tilt against west. Arms control policy requires better integration with US/Allied defense planning needs. It must address differences in superpower deterrence doctrines and negotiating requirements and NATO dependence on non-NATO areas. Policy in each arms control forum should be judged according to criteria of western security interests and international strategic stability.

An analysis of where the US has been, and where it might be headed, in the related fields of arms control and defense strategy. The author arrerses the disappointing record of SALT, and attributes most of the blame of unrealistically high expectation of what strategic arms control could produce. The politicization of arms talks (as in MBFR) is criticized as is the excessive arms control enthusiasm of the Carter Administration.
dilemma. With the independent approach to theatre arms limitation being hamstrung by strategic asymmetries, while composite talks on strategic and medium-range weapons impose severe political strains upon the western alliance. An attempt that the end of the 1970s to find some middle way between these opposing pitfalls failed to provide a solution, and no answer is likely to be found without a wider agreement on the aims and priorities of arms control in general.

USA


The Reagan administration's strong but measured position in INF was instrumental in ensuring that, if there was a possibility to eliminate the Soviet system, the US would certainly exercise that possibility. Another important part of its legacy has been the development of consensus in the US on a bipartisan basis for arms control. It is likely that the bipartisan consensus in the US on arms control will continue. The challenge which faces the next administration is dealing with necessity of being able to move forward at different speeds in different areas.

USSR

111. PICK (Otto). How serious is Gorbachev about arms

In his quest for an arms control agreement which would put a break on SDI, Gorbachev has gone out of his way to make a number of concessions while still insisting on his package at Reykjavik, acceptance of a zero-option on intermediate Nuclear Forces (INF) in the European theatre would probably have surprised the Americans, and certainly alarmed their allies, but it was immaterial as it was part of his overall package. The soviet fixation on SDI and Reagan's absolute refusal to negotiate about his initiative has turn it into a political symbol. Gorbachev would find it very difficult to retreat from his declared position.

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LOW SILENCE NUCLEAR - NUCLEAR FREE WORLD


Another postulates two futures: a low salience nuclear (LSN) world and nuclear free world. His comparative assessment on the five tasks that continuing western nuclear capability and conclude that for only one of the five are nuclear weapons essential, and that one would labour in an NWF world. Widening the argument to include other requirements, risks and opportunities, the explicit goal of an NWF world is shown to offer considerably short and long-term advantage. Achievable in principle, the major obstacle is a mind set shaped by the cold war, which inhibits western official down from addressing the question seriously.
113. COHEN (Arner) and MILLER (Marvin). How to think about and implement - nuclear arms control in the Middle East. Washington Quarterly. 16, 2; 1993; 101-13.

In the Middle-East both the moderate Arab states and Israel now share a common concern about nuclear proliferation, and also recognize the need to deal with it in a regional basis. Given some progress in the Arab-Israeli peace process, a nuclear bargain appears feasible. Israel should also provide reassurance that it regards nuclear weapons solely as a means of last resort without openly acknowledging its nuclear status.


If the US want to deploy more MX missile despite strong domestic opposition, it may be tempted to implement a "counterfile" unilateral arms control initiative - one doomed to fail but which serves a trick to help secure funds for the weapon. To help citizens recognize such as abuse of the begaining tactic, a predictive framework and accompanying histrical evidence are presented. The analysis show that conditionally delaying MX deployment, in isolation from arms control measures, will not induce the Soviet to ban heavy ICMB, because the conditions necessary for
successful unilateral initiative can not be met. Therefore MX is made part of such a unilateral initiative, its probable failure would make it a "counterfeit" one.


This represent the need to control technological capabilities being transferred indiscriminately for both security and commercial reasons. Indian responses to US initiatives to deny space-based technologies on the ground of their potential diversion to missile programs have to be examined in the wider context of Indian security and economic interests. Trend indicate that even the major players on the world stage are moving towards cooperation. They adversarial position based on sensitivities of national sovereignty can only violate India.

116. BUNN (George) and PAYNE (Rodger A). Tit for tat and the negotiation of nuclear arms control. *Arms Control*. 9, 3; 1988, Dec; 207-33.

A bargaining strategy of tit for tat beginning with a concession towards the other side, has been urged by
theorists of US-Soviet arms control negotiation. This article considers the difficulties, both theoretical and practical, to carry out such a strategy on the US side. Given the participation in arms control negotiations by many constituencies - government agencies, congress, US allies and the public. For many reasons, the article concludes implementing cooperative tit for tat is difficult in arms control negotiations.

'Non-proliferation Treaty'

117. SHAH (Prakash). Nuclear non-proliferation implications and NPT review: an Indian perspective. Strategic Analysis. 16, 2; 1993, May; 139-46.

The goal of NPT is to prevent proliferation of nuclear weapons countries, not of weapons. It has failed to achieve even that objective. There are today eight nuclear weapon countries and many nuclear capable countries. NPT allows production and stockpiling of nuclear weapons to five countries and does not ban use: India is committed to non-proliferation but believe NPT will not achieve that objective without improvements. India supports international commitment and concrete action plans for eliminating nuclear arms by an agreed date. Within this overall framework a nuclear test ban and breeze on fissile material production should be the first priority.
The nuclear weapons scenario is not as bleak today as it was when India first refused to sign the NPT on the ground that it was discriminatory and in the existing from world threaten India's security. A number of changes have taken place when if built upon constructively can make it easier to reconcile non-proliferation and India's security concerns and bring nearer the day when the nuclear bomb may cease to be an instrument of a national policy of any country.

The elaborate non-proliferation regime, built around the NPT consists of nuclear safeguard, and an expanding web of technology controls. It is obvious that the non-proliferation regime on NPT is under considerable strain. Pakistan had by the end of 1991 enough weapons grade enriched uranium for about ten nuclear weapons. If Pakistan ever reached the stage of weaponization, India would have to rise to the occasion. A dialogue with US, India must warm them to this possibility, thereby emerging US diplomacy into restraining Pakistan.
Contrary to the mainstream "Logic of non proliferation" which holds that the spread of nuclear weapons to conflict prone regions enhances the threat of nuclear war, another variant holds that the spread of nuclear weapons may contribute to international security rather than threaten it. India and Pakistan have been in a state of perpetual transition to nuclear weapons status since at least 1974. The opaque proliferation approach recognizes this transition period not as an outcome but as a continuing process of regional proliferation.

Only India and all other things being equal, Pakistan make a virtue of their nuclear ambivalence, a highly deplorable policy. India's nuclear option can be perceived as a symbol of protest against the discriminatory policy of the nuclear weapon states, and a factor which can be used to put pressure on those states with nuclear weapon to get them to accept genuine nuclear disarmament. India and Pakistan
should neither give up their nuclear option, nor sign the nuclear non-proliferation treaty (NPT), until the nuclear weapons states implement article VI of the NPT. If Pakistan should decide to go nuclear, no Indian government will be able to withstand the political pressures to follow suit.

INDIA-US


It takes a look at the US non-proliferation objectives and Indian concerns regarding comprehensive global nuclear disarmament. Although the difference in Indo-US approaches to nuclear question become evident in 1968 itself when the NPT was signed. There is something in the non-proliferation approach i.e. common to comprehensive nuclear disarmament and similarly the road that would have to go through the non-proliferation way. It highlights the common grounds where both can meet and explore if there is any scope for accommodation where no common ground exist. The US non-proliferation objectives in the post cold war context at the global level, have been quite succinctly outlined in white house facet sheet on Non-proliferation and Export control policy.

POST COLD-WAR

123. SIMPSON (John). Nuclear non-proliferation in post-cold
Major changes in the International situation since the signing of the treaty on the Non-proliferation of Nuclear weapons (NPT) in 1968, and even since the last quinquennial review conference on the treaty in 1990, makes the next such conference in 1995 an occasion of particular interest. In addition this conference must decide on the future duration of the treaty. Author examines the development of NPT context and concludes that its slow evolution over the year after 1968 has given way to a succession of revolutionary rather than evolutionary changes during the past three years. New proliferation risks and new challenges to international concerns underpinning the non-proliferation regime, are identified and discussed.

As a relationship between the two superpowers becomes more stable, the US should reassess its role in the global effort against nuclear proliferation. In past years, the US adopted a frequently permissive attitude towards two nuclear "maverick" states in particular - Israel and Pakistan, subordinating the goal of preventing nuclear weapons proliferation to other foreign policy goals. This allowed Israel
and Pakistan to reach or cross the threshold of nuclear weapons possession. The Bush administration should now attempt to freeze and reduce these two states nuclear stockpiles, while also working to reduce the security threat these states perceive.

125. DATT (Savita). NPT and the non-nuclear weapons states: Options and non-options. Strategic Analysis. 15, 10; 1993, Jan; 911-23.

Even if India or most of non-nuclear weapons states (NNWS) were to wake up to the opportunity and exercise it to effect a mass exodus from the Non-Proliferation Treaty, it is not certain that the nuclear weapon states (NWS) would accept a treaty on comprehensive nuclear disarmament. They know that it is not the NPT which has kept the countries from going nuclear. They also know that a world without NPT would not become totally nuclear. The IAEA safeguards would continue despite the NPT and rules related to materials supplied by supplier nations would continue to operate. What would be exposed would be the intentions of the NWS.


This article discusses Moscow's fundamental attitude
toward international security. The perceived need for "reliable defence" and the result and rejection of nuclear deterrence. On this basis, different way of translating the Soviet security interest into arms diplomacy are analyzed. The Kremlin's efforts to conclude an intermediate range nuclear force (INF) agreement with the US in 1987 must be understood as a natural outgrowth of policies that has developed over a long time [R].

India began its nuclear energy programme immediately after its independence in 1947. Shifts in the peace policy began in response to Chinese postures of the mid-1960s and finally culminated in the 1974 peaceful nuclear explosion [PNE]. In the late 1970s, Indian nuclear policy came to be restated as a peace policy with a deterrent capability. In the 1980s, Pakistan's emergence as a nuclear capable power has once again opened the nuclear debate in India. While Pakistan is likely to follow a policy of building nuclear capability it is unlikely to go in for weapon production or even a demonstration of capability (PNE). Given such a likelihood, the pressure on India not to shift its present stand would keep India on the peaceful use in nuclear matters.
The nuclear arms control policy of the UK is strongly influenced by Britain's special relationship with the US. This article questions how valid the special relationship has been in the 1980s. It examines the three goals of British strategy in this field, and the four tactical considerations used in evaluating other nations, arms control policies in relation to nuclear arms control, there has been a break down during the 1980s. In the consensus between London and Washington, this is one reason for British attempts to improve relation with Moscow. The danger is one of the UK becoming isolated over its attitude to nuclear arms control policy within NATO. However, pragmatism is a key aspect of the British approach, within certain defined parameters.

The Reagan administration's security policy has been marked by its belief in the nearly universal utility of military power and its quest for superiority. Hence, it has committed itself to a strategic warfighting doctrine and the
development of a wide array of ever more threatening weapons, advocated one-sided proposals for arms control, and only halfheartedly supported existing treaties. To reduce the threat that nuclear weapons pose to humanity a new code of international conduct must elevate the goal of war prevention above the struggle for geopolitical advantages.


Analyses the discrepancies between Soviet declaratory policy with regard to disarmament and some of the statements of military theories on nuclear war-fighting capacities. It relates Soviet arms control policy to the general doctrine of the correlation of forces and tries to show that the present insistence by Moscow in maintaining the nuclear status quo falls reasonably within the scope of that doctrine. It is argued that, compared to the ineptitude of US policy, the Soviet Union has achieved a psychological advantage which may serve its purpose in any East-West negotiations.

The primary nuclear threat faced by non-nuclear states cannot be removed by half way measures like nuclear arms control. It can only be met by comprehensive nuclear disarmament. It is in this perspective that the INF agreement and the START negotiations for a 95% nuclear arms reduction should be viewed. While these agreement are appreciable as steps leading to eventual complete nuclear disarmament. In the absence of further agreement their usefulness in meeting the threat of nuclear weapons to the developing world is questionable.

132. LORD (Carnes). Verification : reforming a theology. The national interests. 3; 1986; 50-60.

Verification is becoming increasingly difficult in a technical sense as the relevant weaponry becomes smaller, more mobile and less distinctive. US intelligence assets that are critical for verification have been lost or compromised by espionage over the last decade. The extent effectiveness of Soviet concealment and deception efforts are growing. Yet the crisis in verification policy is more than the sum of these development. It is at bottom an intellectual crisis, reflecting the persistence of habits of thought that are increasingly inadequate to deal with present realities. The time has come to rethink the verification problem.

A new, more flexible method of negotiations arms control agreements is needed, one which will be consistent with the American Political tradition of congressional involvement in foreign affairs and the common interests of both superpowers. Restructuring the arms control process along the lines of general agreement on Tariffs and trade offers the best opportunity to achieve a reduction in the nuclear inventories of the US and the USSR.


With the burgeoning of nuclear arsenals after World War II, arms control become tightly linked to the cold war political landscape characterised by bipolarity, irreconcilable political differences, an overriding concern with nuclear technology, and an obsession with the military dimensions of security. Arms control was relegated to a technical exercise of fine tuning force structures and military balances. Political based strategies offer far more promise for the future.

On the presumption that everything is like something else bilateral arms control (e.g. the so-called "SALT" negotiations) is compared to duopolistic marketing arrangement between a pair of large rival business concerns who have settled for "orderly marketing" instead of competition. The analogy suggests that bi-lateral arms control will exhibit certain feature (e.g. quantitative arms control taking precedence over qualitative, great attention given to verification procedures, an inherent instability) which appear to correspond closely to the facts as observed.


Arms control negotiators have identified a number of problems in verifying limits on long range nuclear sea-launched cruise missiles (SLCMs). This would include monitoring of the production and maintenance of any non-nuclear long-range SLCMs and any nuclear long-range SLCMs not banned by the agreement. Tagging of these missiles to allow identification at subsequent inspection at shore based maintenance depots would significantly decrease the
probability that undetected SLCMs could be deployed or that non-nuclear SLCMs might be covertly converted to nuclear.

139. MOORTH (P). Nuclear arms and arms control at sea. Strategic Analysis. 12, 1; 1988, Jul; 431-45.

Naval nuclear arms control deserves special attention because of the increasing number of nuclear weapons widely dispersed by the US, the USSR, the UK, France and China at sea. Sea-based nuclear weapons serve two important purposes: for ocean nuclear combat and for striking land targets from the sea. The naval nuclear weapons developed for war fighting at sea, like anti-ship, anti-aircraft and anti-submarine nuclear weapons, should be considered in their negotiations. Both the US and the USSR should limit their areas of operation at sea, and this restriction should be followed by their promise to stop the spread of the nuclear arms race and eliminate their naval infrastructure at sea.


Soviet nuclear deployments in the East have caused growing concern in China, Japan and South Korea. These Soviet deployment underscore the unique security role of the US in the far east. To the extent that the US continues to
take global approach to INF negotiations. It will ineffect be negotiating for Japan and China as well. In order to make the negotiations successful, however, the US must demonstrate that it has a credible counter to the SS-20. As part of its overall improving defense posture in the far east. The US must strengthen its military capability and alliance while at the same time sustaining efforts to negotiate a framework for coexistence with Moscow. Although the Soviet missiles in the far east complicate negotiations in Geneva with the USSR on INF limitations. These missiles also provided an opportunity for the US to underline its role as the solve strategic counter weight to Soviet power in the area.

BUNDY (McGeorge et al). President's choice: star wars or arms control. *Foreign Affairs.* 63, 2; 1984-85; 264-78.

The reelection of Reagan makes the future of his strategic defense initiative the most important question of nuclear arms competition and arms control on the national agenda since 1972. What is centrally and fundamentally wrong with the President's objective is that it can not be achieved. The program offers no prospect for a leak-proof defense against strategic ballistic missiles and it entirely excludes from its range any effort to limit the effectiveness of other systems.
Growing interest in comprehensive arms control has engendered increasing momentum for the proposal to integrate the START and INF negotiations. The author examines the premise that comprehensive arms control talks would be more effective, and considers whether the obstacles to integration currently blocking progress can be more easily solved in an integrated framework.

No element of American foreign policy is more contentious than arms control, yet little attention is paid to the historical record which may yield instructive lessons about arms control. Based on an analysis arms control negotiations and agreements over a period of 150 years. Several propositions are advanced. For example, negotiations are more likely to succeed when military technology is seen to be relatively stable and developing slowly. Politically, arms control negotiations have proven to be a poor way for hostile nation to brack the diplomatic ice over time military services have exerted increasing influence over arms control policy. Theunderstanding of arms control - its
possibilities and limitations can be improved by the study of earlier negotiations and accords.


In the early 1980s, President Reagan proposed induction in strategic arms (the START talk) and space based defense program (the strategic defense initiative) in response to increased public agitation over nuclear arms and decaying Soviet American relation due, in part, to non-retification of SALT-II. Numerous critics, both within the administration and without questioned the value of negotiation deep reductions. Careful analysis of effect of such reductions reveal several positive political impact as well as several uncertain or potentially damaged strategic consequences. More valuable then simple reductions in the number of war heads, however, would be measure which increases reliance on nuclear weapons. If Reagan does not overcome largely self-created obstacles to achieving such measures, future administration will face the dilemma of deterrence in an even more turbulent political environment.

The US arms control agenda for the near future will be dominated by the effort to realize a strategic arms reduction treaty (START). The main element of such an agreement is a major reduction in offensive strategic weapons. In addition, such a agreement would set up a system of counting rules for attributing "Points" to deployed systems, establish a limit on the number of nuclear point each side would be permitted to have in its overall strategic force and require forms of co-operation by the USSR to determine the "point structure" of the Soviet force. The prospective agreement could produce large overall cuts, reinforce the infeasibility of first strike, and prevent increases in current force levels.

146. ZIMMERMAN (Peter D). Quota testing. Foreign Policy. 44; 1981; 82-93.

A comprehensive test ban treaty would be a significant step in slowing the momentum of the arms race. However, a true comprehensive test ban treaty could have an adverse effect on how Americans assess the security of their country. A loss of confidence in the reliability of the nuclear stockpile would inevitably occur without testing. The problem is that the complete absence of such a treaty could undermine the effort to control nuclear proliferation.
27 nuclear explosions were conducted in 1989, fewer than the yearly average for the past 28 years. This was because the US and the USSR carried out fewer tests than in previous years. For the first time in many year no so-called peaceful nuclear explosion was conducted. Protests against nuclear testing for environmental as well as for disarmament reasons increased. Demonstrations at the Soviet test site at semipalatinsk were reported by Soviet mass media. The Kazakhustan government requested the authorities to close the test site aus stop the testing programme.

The Gore proposal for nuclear arms control envisages a 12 year period divided in to two phases: the deployment of the last of the MIRVs, and the shift away from MIRUS to single-warhead missiles. This plan is designed to gradually shift the forces of both sides to dramatically lower levels, with mixes of weapons on each side that are mutually stable. The Gore proposal would have a self-regulating a implementing characteristic in that each side would have an interest in maintating a stable nuclear relationship.
President Eisenhower's 1953 Atoms for peace programme tried to link the control of horizontal proliferation with that of vertical proliferation. The difficulty was that how these problems might be related, and even what they were, did not get enough study. Most generally, the two things most responsible for Atoms for peace's failings were its being mistaken about the precise character of the threats it was designed to limit and its premature fatalism.

In 1986 there appeared realistic prospect for a halt and reversal in the growth of the nuclear arsenals of the US and the USSR for the first time since the beginning of the nuclear age. The agreement reach at the Stockholm conference in September represented a limited but useful step toward regulating the activities of NATO and Warsaw Pact forces. At Reykjavik, in October. The US and USSR worked out the basic elements of a series of potential agreements that had eluded them for years. By the end of 1986 it was clear that the year had been a very active and potentially significant one for arm control.
The US must develop military and political programs of the latest type in consonance with firm, clear armaments negotiated with the USSR aimed at major reductions in the number and power of nuclear weapons, at the achievement of nuclear quality at lower numerical and destructive levels, and at lessening the risk of the utilization of nuclear weapons in war. These modernized forces must be integrated for maximum efficiency.

Arms control agreement can be designed to help the US ensure that its nuclear forces are sufficiently capable and survivable to provide for deterrence through the threat of effective retaliation. Arms control, thereby contributes indirectly to the maintenance of peace and the avoidance of nuclear war. US objectives in a future nuclear arms control agreement with the USSR should be to constrain the overall build up of nuclear weapon and to establish overall equality under a broad set of measures.

As the result of both substantive and procedural changes in Soviet arms control diplomacy under M. Gorachev, western observers have speculated that the fundamental change in Soviet arm control is taking place such a judgement may be premature. The USSR seems prepared to consider a range of arms control regimes, including heavy reduction in nuclear forces, that previously would have not been acceptable. But the USSR has always treated arms control in a comprehensive fashion, within the overall context of Soviet and foreign policy; So it is not surprising that Soviet positions have altered.


The USSR has long believed that the most powerful modern weapon in its arsenal would be a clear-cut Soviet first strike nuclear capacity. It altogether correct in believing that an unequivocal Soviet first strike capability would split and paralyze the West, inhibiting the possibility of any Western response, conventional or nuclear, to the indefinite expansion of Soviet power. No
western government wants to test the arcane calculations of
the nuclear first strike exercise impractice. Even though a
deliberate nuclear war among the nuclear powers is the least
likely scenario, the state of the nuclear balance is a
critical and in many circumstances a decisive factor in
determining the ability to use or threaten to use
conventional force.

155. SEN GUPTA (Bhabani). Soviet position on nuclear arms
control and limitations. Strategic Analysis. 9, 12;
1986,. Mar; 1282-1300.

In nuclear arms, or atleast strategic nuclear arms
the USSR continues to be the defensive, revisionist super
power : its goal is to deny the US strategic superiority,
and it has by and large achieved that goal. Soviet nuclear
arms policy have been generally reactive to US achievement
and doctrines. Unlike the US, Soviet nuclear arm control and
limitation policies have not been buffeted domestic
political consideration. Like Soviet foreign policy itself,
nuclear arms control and strategic limitations have enjoyed
a remarkable continuity. After Gorbachev, the USSR will
device fresh initiative to reduce Europeans to work out the
European system of security. It will press the US for a
unilateral inf not a joint declaration of no first use of
nuclear weapons and for a freeze on nuclear arms production.
Judgement about the verification risks entailed in participation in an arms control agreement are made within the framework of Cold War anxieties and influenced by political and bureaucratic considerations. In approaching the strategic and theater nuclear arms control agenda of the 1980's, it will be necessary to device verification regimes which not only provide reliable security guarantees against strategic breakout, but which also promote confidence among arms control policy influential groups and strengthen coalitions in favour of participation in the agreements.

Repeated refusal to admit international inspectors even on reasons of nuclear safety, would lead to serious suspicion about the potential diversion of nuclear material. There are, in fact, example of countries deliberately playing on the politics of non-compliance. If such is the reality of compliance dipomacy today with the national security of the superpowers at stake, the rest of the world must show remarkable determination to cultivate the means of active participation.
In the US even liberal advocates of arms control take as their basic premise that the USSR can not be trusted to comply with the term of treaties. On the other hand, the tendency of the USSR to seen in every US proposal for increased transparency a sinister effort at espionage is evidence for a high level of distrust. In fact there is no necessary reason to assume that states which maintain a tight control over information and political expression are less trustworthy than pluralistic states in complying with arms control agreements.

The arms control experience of the past 25 years has shown verification to be the key of the future success of formal arm control agreements, and has highlighted how crucial cooperation is to the verification effort. Unfortunately, fundamental disagreement persists within the US over what we should expect from verification, and we seems to have lost sight of how far we have come with the USSR. The first half of this article outlines the question involved in the debate over verification how much of it is
enough, and what we should do about suspected cheating. These include measures to foster resolution of treaty related problems, increase the effectiveness of national technical means, and allow the use of "Black box" sensor. These precedent represent considerable progress of which we should remind ourselves, especially at the time when they may be replaced in jeopardy by our more recent lack of success in arms control.

WAR, PREVENTION


Many of the measures for reducing the risk of nuclear war do not require negotiation with the USSR. They are susceptible to policy responses which are domestic and unilateral. It would be a mistake to ignore even modest improvements in lowering nuclear risks. But it would be a mistake to constrain a strategy for nuclear risk reduction to measures that deal with the least likely paths or only the precipitating rather than deeper causes.


Highlights that the main goal of arms control is to reduce the probability of nuclear war. Current arms control
efforts, with few exceptions, are almost entirely devoted to trying to achieve relatively minor reductions in force levels. The probability of nuclear war is influenced by many factors. Perhaps the most important are the potential outcome of surprise attacks, threats to strategic force survivability, and required rapid response times which can lead to mistakes or miscalculations. It is suggested that long term arms control policy and objectives be directed towards the control and elimination of short time delivery system.

KEEP, PEACE MOVEMENTS in relation to MARXISM-LENINISM

162. YOUNG (Elisabeth) and YOUNG (Wayland). Marxism-Leninism and arms control Arms Control. 1, 1; 1980, May; 2-29.

It is to the nature of today's Marxist-Leninism and to the USSR's Marxism-Leninist peace program that the west and the world must look if it is to succeed in persuading the USSR to reduce its armaments. Marxism-Leninism is the criterion for the administration of justice and the logic of the arms build-up in the USSR; it underpins the relations with allies and with the various capitalist and other foreign countries and governments. The west has not sufficiently taken account of this factor.

KEEP, POLICIES, BUSH compared with CARTER

163. LAGON (Mark P) and FINEL (Bernard I). Logic of American

A comparison of Carter administration's pursuit of SALT II and the Bush administration's strategic arms control policy immediately after the cold war reveals flaws in the premises behind the advocacy of arms control. There are four basic reasons why arms control had so little utility: (1) arms control did not address the real sources of insecurity in the world; (2) it was based on the false notion that more arms necessarily made war more likely; (3) it did not increase cooperation, but merely provided another area of conflict; (4) it ensured the confrontation would continue by freezing in place an unstable status quo.

164. MASON (David S). Romanian autonomy and arms control policies. Arms Control. 3, 1; 1982, May; 13-36.

Romania has pursued a maverick policy on arms control, as a means to bolster its autonomy and reduce its dependence on the USSR, Romania has been East-Europe's most outspoken critic of the arms race, and assigns equal blame to the superpower for their inability to moderate the race. Romania leaders have proposed numerous, detailed, and far-reaching plans for military disengagement in Europe. These often differ substantially from soviet or Warsaw pact positions. These policies are a means toward achieving
Romania's view of a desirable world order which includes a greater role for smaller states, a decreased use of force in relations among states, and a reduction in the importance of the military blocs.


The balance of power approach to world order provides a foundation for contemporary arms control praxis. This approach accommodates two diverse images of international reality and two contending foreign policy elite belief system. Both of these images and belief systems possess implications for contemporary arms control efforts. The traditional image of international reality along with a "cold war internationalist" foreign policy belief system shaped the Reagan administrations views on arms control. There were, however, deep arms control division within that administration which resulted in an arms control policy stalemate. Attention to the sources of this stalemate, particularly in the appointment process, could aid future presidential administrations in the successful pursuit arms control policies.
The firmness of the Reagan administration's arms control policy in the face of the Soviet propaganda offensive and domestic pressures generated by it - already has been rewarded by a Soviet counterproposal that, although it holds out sweeping inequalities, for the first time pays Soviet deference to the principle of deep reductions in the nuclear inventories of both sides. The administration crafted its negotiations policy with a clear understanding of the mistakes and failure that marked the road of SALT I and SALT II - failures attributable as much to American myopia as to Soviet exploitation and breaches of agreements. The newly charted road to Geneva is based on the principle of reductions, equality and veritable compliance and on recognition of the essentiality of objective leverage to an equitable and constructive bargaining process.

The geopolitical and ideological conflicts between the US and USSR are the main cause of hostility and tension. Competition in arms, both strategic and conventional is the consequence of that condition not its cause. Any arms control agreement has to evolve on site verification if it
will contribute to a genuine mutual stability. If the Soviet response or on going Soviet programs proliferate Soviet strategic system, US additional deployment will have to be quite substantial at the same time. It would not be destabilizing international if SDI were linked to self imposed restraint on the US side on the number and character of further US strategic offensive deployments.


Arms control remains a central concern of soviet foreign policy, despite the recent changes in Kremlin leadership and deterioration in East-West relations. The sustained but ultimately fertile Soviet effort to prevent deployment of new NATO missiles in Europe has made it even more difficult to reach new strategic or conventional arms agreement leaving a legacy of complication and statement with the Chlervenko-lead Politkuro must now controld.

SHULSKY (Abram N.) Intelligence and arms control policy. Teaching political Science. 16, 2; 1989; 47-54.

Although intelligence has a significant role to play with respect to every aspect of arms control policy, it seems particularly important with respect to verification, and its
role is often controversial. Typically verification is considered to have three functions: detecting violations, deterring violations and increasing confidence in parties compliance with existing arms control agreements. Of these three functions, the first is fundamental. The other two functions serve, as it were, cause of arms control itself; they maintain the viability of a national security policy option which otherwise would not exist, or would not be desirable. A wider task of intelligence in arms control for the US is the divining, and advising on ways of influencing, basic Soviet intention in the strategic and political realms.

PROBLEMS


Arms control is not a logically consistent concept, its various goals can not be achieved simultaneously and with equal effect. Arms control theory has encouraged its own critique which again is essentially apolitical. In spite of continuous innovation in weapons technology, arms control is not basically a technical problem. Asymmetries in force posture and doctrine between East and West will prevent neat solutions to theoretical problems of stability.
While ballistic missile proliferation adds a significant element to regional tension and instability it is, after all, but one consequence of that regional insecurity and not a prime cause of it. Unpalatable as it may just appear, given the general level of instability in the middle east, serious arms control—whether of a ballistic missile, chemical or nuclear variety may well have to follow political settlements of the various disputes or be included in them. To conclude otherwise may be both overly optimistic, and only serve further to divert attention away from addressing the deeper political frictions that characterize the region.

Public opinion is not reflected adequately in opinion results alone; one must also consider the levels of knowledge, concern and consistency underlying the opinions expressed. Arms control does not seem to make as much difference to public anxiety about war as do other
developments such as new nuclear deployments or the level of political tension. Garbachev's "peace offensive" is falling flat because it is defusing the anxiety promoting British protests against nuclear weapons, faster than it wins coverts. The British governments should not be panicked into an unsincere propaganda contest of radical disarmament initiatives, but should stress the stabilizing benefits of more limited measures of arms control.


Developments of a coherent arms control strategy has become an essential elements of Western efforts to stabilize the military competition and ameliorate the political climate. Although Allied governments agree on the general thrust of new conventional arms control initiatives, important differences remain on the long term objectives of western arms-control policy. There remains a fundamental divergence of Eastern and Western views concerning the state of the conventional balance in Europe, as well as the types of force reductions or restructuring and associated measures that would best enhance stability.

174. FAIRBANKS (Charles H. Jr) and SHULSKY (Abram N). From

A decision to reduce levels of certain arms does not just reduce those levels, but sets in motion a series of changes involving other weapon systems, the organizations that run them, and the doctrine according to which they would be employed. Very low levels of arms are indirectly cause unnecessary tension if the political situation change and one country reacts by a rearmament program which change the relative strengths of the parties in a very rapid manner. The question of the appropriate level of armament is much more complicated than is suggested by the view which sees the primary purpose of arms control as that of breaking the momentum of the arms race.


This article discussed aspects of arms control where Canada has the greatest potential influence because of special experience of expertise. Four are selected for detailed analysis: (1) Arctic, and the possibility of a nuclear war-fare and free zone and a zone of peace are discussed. (2) Anti-submarine warfare and the concept of sanctuaries for sub-marines is proposed. (3) Comprehensive bar on nuclear tests, where Canadian reisomologists have
solved technical problems of verification. (4) Chemical warefare, where political will is required for international control agreement.

____,____ POLITICS


There are many ways in which arms can be controlled. The approach known as arms control, which focuses upon the negotiation of measures of limited cooperation among potential foes, is among the least productive. Instead, the control of arms is achievable by policies designed both to balance the power of possible rogue states and to diminish the political incentives for conflict. The true relationship between arms and politics revealed by the conclusion of the cold war should stimulate a wholesale reappraisal of how arms can be best be controlled.

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177. MILLER (Steven E). Politics over promise : domestic impediments to arms control. International security. 8, 4; 1984; 67-90.

The disappointing result of arms control in the US seem to be a consequence of an imposing set of political impedements : policy formulation, the ratification process electrol politics, congressional politics bureaucratic
politics, public opinion, even international politics have to be aligned properly or managed effectively if arms control is to be pursued successfully. Arms control progress requires that all internal political factors be brought into positive alignment.

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178. DAALDER (Ivo H). Role of arms control in the new Europe. Arms Control. 12, 1; 1991, May; 20-33.

Arms control in Europe must have a new, more expansive role. This is not to say that the pursuit of arms control is sufficient to ensure European security. Threat to security are many, only some of which can be mitigated through arms control. The road from cold war to a pluralistic security community is a long one and the likelihood that Europe as a whole will reach that destination is small. Arms control negotiations may lay the basis for transformation of political relations away from potential confrontation towards mutually beneficial co-operation.

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179. MURRY (Mathew). Procedural alternative for arms control. Arms Control. 6, 3; 1985, Dec; 213-42.

The success of step by step arms control in the US congress will depend upon the capacity of the executive branch, and the willingness of the senate, to get agreements
passed with minimal political fanfare, so that they can move quickly on to the next step. The Joint resolution procedure will complement this strategy by providing the opportunity to obtain congressional consent without the unnecessary scrutiny, delay, and political bargaining characteristic of the treaty making procedure. By reducing the uncertainty over whether agreement will be passed, it will help the executive conceptualize and carry out a step by step approach to arms control.


Although the UN Charter makes few references to disarmament, the UN has provided a central forum for arms control efforts. However, in addition to promoting and setting goals for negotiations, the UN should codify the principles of the law of arms control accepted internationally and in particular, elaborate new ones. While the use of weapons is already subject to limitation under the humanitarian law of ular, there is a growing body of opinion that the right of nations to possess arms should also be limited by law.
181. MACK (Andrew). Naval arms control and confidence building for North-East Asian waters. Korean Jl. of Defence Analysis. 5, 2; 1993; 135-64.

Since the security environment of Asia-Pacific is primarily a maritime one, maritime security issues are highly salient. This paper focuses on the prospects for maritime security cooperation, confidence building, and naval arms control in North-East Asia. It examines the particular barriers to progress in China, Taiwan, the two Koreans, Japan and the US and Russia. It also describes the tentative attempts to institute dialogue on a bilateral basis and suggests some option for accelerating this process in future.

182. STIVERS (William). Doves, hawks, and detente. Foreign Policy. 45, 1981-82; 126-44.

In assessing the Indian Ocean arms control episode it is apparent that those who advocated naval limitations had the better analysis. But the hard-liners had a clearer vision of how the world should look and what means the US had to employ to guarantee that vision. The doves were more sophisticated, the understood history. However, the liberals, unlike the conservatives could never formulate a conception of what constituted acceptable soviet behaviour.
Between June 1977 and February 1978, representatives of the US and the USSR met four times in an attempt to negotiate an arms control regime for the Indian Ocean. Soviet assistance to its client Ethiopia in the latter's conflict with its neighbour Somalia constituted the proximate cause for US termination of the diplomatic enterprise. Yet although substantial progress had been realized towards negotiating a pact that would limit US and Soviet naval deployments in the Indian Ocean, it is not at all certain that further negotiation could have bridged the remaining differences. The mostly unsuccessful efforts highlight the technical and political obstacles to concluding arms control pact as well as the limited potential of formal arms control to contribute to a moderation of superpower geopolitical competition.

Soviet submarine-launched ballistic missiles (SLBMs) fired close to US shores and using trajectories that
minimize the time of flight have appeared well suited to attacks on US strategic bomber bases and on many critical component of the command, control and communication network. A freeze on the deployment and flight-testing of new SLBMs and sharp limitations on the flight-testing of existing SLBMs would have a significant impact on the level on the SLBMs counterforce capability that could be developed.


An examination of existing legal restraints on naval forces and arms control agreements lead to the conclusion that the US is already heavily engaged in naval arms control. With today's new international security environment, the author recommends a series of additional naval arms control measures.


An analysis of the contemporary East-West Naval balance, with emphasis on the US and USSR, is placed with in the context of the basis of seapower. Three aspect of seapower - the economic, the diplomatic political and military strategic are discussed in terms of major naval
missions in the three situations: peace time, a conventional war environment and a nuclear war environment.

SECURITY, EUROPE


Recent proposals for collective security confuse causes and effects of peace, and could widen conflicts in Eastern Europe as easily as they might suppress them. Arms control treaties also make less sense in Europe after the cold war because stability depends on dyadic military balances, but alignments for a future conflict are not known.

1980's

188. WILLIAMS (Phil). Arms control and European security: competing conceptions for the 1980s. Arms Control. 4, 2; 1983, Sep; 75-96.

As a result of the experience of arms control in the 1970s, the optimism and apparent certainty which pervaded much thinking on the subject has given way to a new period of pessimism and doubt. What often appear to be arguments over arms control are really argument over the nature of the real threats to European security. Different prospective yield different criteria whereby arms control initiatives, negotiations and agreements can be appraised.
Since 1973, efforts have been made by NATO and the Warsaw Pact to device a mutually acceptable formula to reduce on a reciprocal basis military personnel and their associated weaponry in central Europe. These efforts, known in the west as mutual and balanced force reduction (MBFR) have laid and important foundation for the reduction of military forces in central Europe. If an arm reduction agreement is concluded as the result of the talks between Reagan and Gorbachev it can be regarded as a logical outcome of these long standing mutual force reduction negotiations.

The concept of SIA is gaining increasing importance in discussions of security policy. In practice, SIA exists when military forces serve an efficient defence and deterrence function, but in virtue of their organization, structure armament and strategy are clearly in capable of engaging in aggressive operations. The creation of a chemical weapons-free zone and tank-free zones. Ultimately,
this defensive zone system would be expanded to include all of Europe in a step by step fashion conceived to move progressively closer to the final elimination of offensive potential.


There is a recognized need to outlaw anti-satellite (ASAT) weapons. An arms race in outer space is not possible to win in any worthy sense of the term and at the present time there are solutions which could prevent it. The best way to approach the problem would be to put constraints on permitted satellite formations, so as to preclude additional accuracy and redundancy. The general problem is that many of the available solutions are unpalatable.

192. ANDELMAN (David A). Space wars. Foreign Policy. 44; 1981; 94-106.

The next generation of American and Soviet weaponry is already taking shape in laboratories in both countries - weaponry that will substantially alter the way war is fought. Generically these weapons are called directed energy weapons. Specifically, they are lasers and particle beams.
With present scientific and technical knowledge, space based lasers are the most feasible for development into a complete anti-satellite (ASAT) system. In a more elaborate configuration they could serve as an anti-ballistic missile (ABM) system as well. The most critical strategic problems posed by such systems are vulnerability to counter-measures, survivability and above all, reliability of command and control communications.

Examine the military incentives and disincentives for developing anti-satellite weapons from both Soviet and American perspectives. First a comparative analysis compares and contrasts Soviet and American military strategies in terms of the prospective roles and missions that might be assigned to anti-satellite weapons. Second, differences in the vulnerability of each nation's overall military capability to anti-satellite operations are examined. Third, option for minimizing the effects of anti-satellite weapons on military forces are described.

Describes the edge of military competition between the US and the USSR involves the use of outer space for warlike purposes. A treaty should be formulated and signed by all powers debarring all satellite weapons and hence safeguard the command, control and communications networks of the super powers, thereby supporting the survivability of deterrent systems. The treaty should also enhance the safety of verification and observation satellites and forest all the development of space based ballistic missile defenses.


Irrespective of their hopes or expectations to reaching an agreement the Soviets will attempt to exploit negotiations on controlling space weaponry for propaganda purposes. Although there are widely divergent views on the arms control objective on the USSR, an analysis of past negotiating behaviour suggests that the Soviet view arms control as a means of preserving or obtaining relative military advantages, or creating a climate (e.g. detente)
that facilitates achievement of military, political and economical objectives.

SUPER POWERS, MBFR, EUROPE

196. SHEEHAN (Michael). A more inane congress: twelve years of MBFR. *Arms Control*. 6, 2; 1985, Sep; 150-9.

Mutual and Balanced Force Reductions (MBFR) have achieved little if anything in the past twelve years. Given that the talks do not address NATO's real problems to any significant degree, nor those of the USSR, that there may be costs as well as benefits associated with the continuation of the dialogue and that the beneficial aspects of MBFR are being promoted in confidence and security building, measure and disarmament in Europe, MBFR seems increasingly to be a pointless exercise.

SOLUTIONS

197. INTRILIGATOR (Michael D) and BRITO (Dagobert). Non-Armageddon solutions to the arms race. *Arms Control*. 6, 1; 1985, May; 41-57.

There can be non-Armageddon solutions to the arms race. The US and the USSR have, via the arms race and arms control initiatives, developed a system that has great stability. Consideration of its imperfections suggests a restructured arms control agenda focusing on accidents, particularly launch on warning; the potential erosion of
deterrence via antisubmarine warfare and space-based defense and the potential for nuclear weapons to fall in the wrong hands.

WEAPONS TRADE


If arms transfer restraint encourages undesirable consequences, then it will have to be coupled with other forms of restraint is not presently into the offering. The conventional Arms Talks have not resumed for two years, and in the present climate of superpower relations, that situation is unlikely to change. The prospect of other factors in the arms trade taking initiatives instead appears as remote as ever.

TRADE, CONVENTIONAL WEAPONS, USA


A constellation of events, particularly the international primacy of US, suggest that the global environment is ripe for conventional arms control initiatives. It will be American interests, influence and restore that will determine the character and effectiveness of international arms control measures, not the contents of general multilateral agreements. The best to be hoped for one regional or global agreement to limit the export of specific types
weapons on a case by case basis and general accord to control the flow of arms to belligerents. If expectation remain modest there is cause for guarded optimism. The balance appears to be shifting in favour of further regulation of the conventional arms trade.

200. JOHNSON (Paul G). Arms Control and managing Linkage. Survival. 28, 5; 1986, Sep; 413-44.

The American application of linkage has been inconsistent from administration to administration and the failure of US president to manage linkage properly has undermined. The ratification of arm control treaties, American leader must develop a long term strategy for using linkage, taking into account of different types of linkage and supported by a broad, bipartisan base consistent with assessment of American national interest. The linkage strategy can be an effective instrument in the arm control process.

201. GELLNER (Charles R) and RUSTEN (Lynn F). United states arms control and disarmament agency, data on management, personnel, budget, status and related matters. 1981-83, Arms Control. 5, 2; 1984, Sep; 128-47.
This article examines the resources available to ACDA to carry out its legislatively mandated functions during the first three years of the Reagan Administration. In 1981 and 1982, the Reagan administration reduced ACDA's budget and personnel levels, delayed in making top management appointments, and gave less emphasis to ACDA's role in national security policy making than did the Carter administration. Beginning in 1983, the administration took measures to strengthen ACDA. Charts illustrating management turnovers, staffing levels and budget trends are included.

_____ , USA CONGRESS

202. FASCELL (Dante B). Congress and arms control. Foreign Affairs. 65, 4; 1987; 730-49.

Each of the arms control amendments of 1986 will be persued again during the 100 the congress. Despite the obvious need to work toward a consensus with congress on the nation's arms control policy, the administration once again has thrown down the guntlet. There is considerable concern in congress that some of the administration's proposals for complete nuclear disarmament and premature deployment of SDI would damage US national security and undercut the leverage American negotiators will need in future talks with the Soviets.

_____ , USA-USSR

203. DIXON (William J) and SMITH (Dale L). Arms control and
the evolution of superpower relations. Social Science Quarterly. 73, 4; 1992, Dec; 876-89.

This study investigates whether or not the enactment of bilateral arms control agreements systematically influenced the foreign policies and behaviour of the US and USSR toward one another. All formal arms control agreements and treaties between the superpowers are treated as inventions in an interrupted time series quasi experiment applied to event based measures of diplomatic relations. The impact clearly contributed to an improvements in diplomatic realtions rather than the reverse, and these improvements were sufficiently robust to rise above the powerful effects of action-reaction dynamics.

204. EBERSTADT (Mary Tedeschi). Arms control and its causalities. Commentary. 85, 4; 1988, Apr; 39-46.

In the course of its overtures to the USSR, the US administration has sacrificed most of the momentum and many of the principles and initiatives that marked its early years. However, it is the costs to the US abroad that remain the most critical consequences. In addition, the administration's persuit of arms control has had a negative effect on the US policy on terrorism. The loss of the Reagan arms control agenda appeared to vindicate the intellectual and bureaucratic power of the foreign affairs establishment.
and to elevate to the level of statesman the administration's most persistent critics.

205. BRADY (Linda P). Arms control and the Carter administration: the management of contradictions. Southeastern Political Review. 16, 1; 1988; 175-203.

Much of the blame for the failure of arms control during the late 1970s must be ascribed to the Carter administration's inability to manage, the contradictions inherent in US-Soviet relations, the US European relationship, and defense planning and arms control. The Carter administration learned too late a successful arms control policy requires the expenditure of large amounts of political capital. There were, however, factors beyond the control of the Carter administration, such as Soviet adventurism in Africa and involvement of the USSR in the civil war in Afghanistan.

206. BAKER (RH). Another perspective on Marxism-Leninism and arms control. Arms Control. 1, 2; 1980, Sept; 157-76.

Soviet leaders do not concern themselves extensively with the difficulties posed for dialectical materialism by the philosophical implications of the special and general theories of relativity. Leninism is a factful doctrine with
an articulated but as yet unmanifested commitment to the achievement of an unknowable set of social and economic arrangements. The nature of the USSR's international being has to be understood through the record of its experience in international affairs.

207. KILGOUR (D Marc). Site selection for on-site inspection in arms control. Arms Control. 13, 3; 1992, Dec; 439-62.

Arms control agreements rely increasingly or strictly limited amounts of on site inspection to achieve their objectives. Random choice of sites to be inspected clearly serves the purposes, although the precise connection between strategic goals and site selection pattern is problematic in the absence of collatoral information. Formal models are analysed using games theoretic techniques to identify strategically optimal site elections. Usually sites with greater military values should be inspected more often, but less than proportionate of their values.

208. EPSTEIN (Edward Jay). Disinformation : or, why the CIA cannot verify an arms control agreement. Commentary. 74, 1; 1982, Jul; 21-8.

Congress and informed US public have been under the impression that satellites and electronic wizardly can be
relied upon for fool proof intelligence. The story of the misestimates of Soviet missiles accuracy demonstrate that these means are quite susceptible to Soviet deception. The persistent denial of the problem of disinformation serves only to increase its chances of success. And without a radical reorganization opposed by CIA bureaucracy, few measures can be taken to prevent it from being double crossed again.


The essence of the US approach to arms control intelligence is the willingness to look at some thing one can see and take it as a substitute for many things one cannot see. It is legitimate to say that some of the most important strategic questions the US must face are relatively intractable to technical intelligence. Not the least of the lessons the US can learn as it disentangles its technical intelligence from the intellectual categories of arms control is to dissolve the smugness about its knowledge of the USSR that comes along with intelligence satellites. This smugness led the US to try to make up with "verification" what it lacked in political and military policy.
During the negotiation for the limitation of intermediate range missiles, the US introduced the idea that production facilities for the missiles be monitored to enhance verification. Production monitoring breaks new ground in arms control verification. By counting weapons as they are produced each side can maintain an accounting of the inventory of weapons that the other side has with production monitoring new verification possibilities open up for weapons that are difficult to account for once deployed. However, production monitoring will not solve all the problems of arms control verification.

On-site inspections are no substitute for the military adjustments, preparations and resource necessary to defend NATO in the event of a conflict. But serious evaluation of their potential complement to NATO's defensive capacity is overdue. It would be wasteful to use inspections for purposes other than gathering information, and a
perversion of the concept of verification in arms control to do so. But this should not restrict the use of inspections for other purposes.

WEAPONS-PROLIFERATION, INDIA-PAKISTAN


South Asia continues to suffer from ethnic, territorial, and ideological tensions indigenous to the area. In order to deal with these threats, states procure sophisticated arms and increase their defense budgets. Regional stability necessitates a series of arms control measures among these states. Since it is difficult to control the spread of weapons in the post-proliferation stages; it is critical to manage this effectively. Traditional measures to limit horizontal proliferation are insufficient in this regard. Realistic assessments of regional politics military environment need to be made to evolve appropriate policies. Measures could primarily involve Indo-Pakistan agreements on nuclear and ballistic weapons, along with certain assurances from China. States in the region also need to shed their reservations on regional arms control.
*PART THREE*

*INDICES*
"LIST OF PERIODICAL DOCUMENTED"

<table>
<thead>
<tr>
<th>Name of Periodicals</th>
<th>Frequency</th>
<th>Place of Publication</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. American Journal of Political Science</td>
<td>Quarterly</td>
<td>Austin (USA)</td>
</tr>
<tr>
<td>2. American Academy of Political and social Science, Annals</td>
<td>Bimonthly</td>
<td>California</td>
</tr>
<tr>
<td>3. Arms control</td>
<td>3/yr</td>
<td>London</td>
</tr>
<tr>
<td>4. Asian Survey</td>
<td>Monthly</td>
<td>California</td>
</tr>
<tr>
<td>6. Comparative strategy</td>
<td>Quarterly</td>
<td>Bristol</td>
</tr>
<tr>
<td>7. Daedalus</td>
<td>Quarterly</td>
<td>Cambridge</td>
</tr>
<tr>
<td>8. Defence Analysis</td>
<td>Quarterly</td>
<td>New York</td>
</tr>
<tr>
<td>10. Economic and Political weekly</td>
<td>Weekly</td>
<td>Bombay</td>
</tr>
<tr>
<td>12. Foreign Affairs Reports</td>
<td>Monthly</td>
<td>New Delhi</td>
</tr>
<tr>
<td>13. Foreign Policy</td>
<td>Quarterly</td>
<td>Washington DC</td>
</tr>
<tr>
<td>14. Global Affairs</td>
<td>Quarterly</td>
<td>Washington DC</td>
</tr>
<tr>
<td>15. Indian Defence Journal</td>
<td>Semi-annually</td>
<td>New Delhi</td>
</tr>
<tr>
<td>16. Indian Journal of Political Science</td>
<td>Quarterly</td>
<td>Madras</td>
</tr>
<tr>
<td>17. International Affairs</td>
<td>Quarterly</td>
<td>Cambridge</td>
</tr>
<tr>
<td>19. Journal of conflict Resolution</td>
<td>Quarterly</td>
<td>California</td>
</tr>
<tr>
<td>21. Journal of Social, Political and economic Studies</td>
<td>Quarterly</td>
<td>Washington DC</td>
</tr>
<tr>
<td>No.</td>
<td>Journal</td>
<td>Frequency</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>22</td>
<td>Journal of Strategic studies</td>
<td>4/yr.</td>
</tr>
<tr>
<td>23</td>
<td>Millenium</td>
<td>3/yr.</td>
</tr>
<tr>
<td>24</td>
<td>Orbis</td>
<td>Annual</td>
</tr>
<tr>
<td>25</td>
<td>Peace and the sciences</td>
<td>Quarterly</td>
</tr>
<tr>
<td>26</td>
<td>Political Science Quarterly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>27</td>
<td>Regional Studies</td>
<td>Bi-monthly</td>
</tr>
<tr>
<td>28</td>
<td>Social Sciences Quarterly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>29</td>
<td>Standard Journal of International Law</td>
<td>Semi-annually</td>
</tr>
<tr>
<td>30</td>
<td>Strategic Review</td>
<td>Quarterly</td>
</tr>
<tr>
<td>31</td>
<td>Teaching Political Science</td>
<td>Quarterly</td>
</tr>
<tr>
<td>32</td>
<td>Washington Quarterly</td>
<td>Quarterly</td>
</tr>
<tr>
<td>33</td>
<td>World Affairs</td>
<td>Quarterly</td>
</tr>
<tr>
<td>34</td>
<td>World Policy Journal</td>
<td>Quarterly</td>
</tr>
<tr>
<td>35</td>
<td>World Today</td>
<td>Monthly</td>
</tr>
</tbody>
</table>
# Author Index

<table>
<thead>
<tr>
<th>Author's Name</th>
<th>Entry No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adeniran (Tunde) and Stopfer (Howard)</td>
<td>2</td>
</tr>
<tr>
<td>Allison (Roy)</td>
<td>32</td>
</tr>
<tr>
<td>Andelman (David A)</td>
<td>192</td>
</tr>
<tr>
<td>Arbaton (Alexei G)</td>
<td>11</td>
</tr>
<tr>
<td>Auton (Graeme P)</td>
<td>106</td>
</tr>
<tr>
<td>Bailey (Sydney D)</td>
<td>73</td>
</tr>
<tr>
<td>Baker (R H)</td>
<td>206</td>
</tr>
<tr>
<td>Bar-Naby (Frank) and Windass (Stan)</td>
<td>79</td>
</tr>
<tr>
<td>Baranovsky (Vladimir)</td>
<td>52</td>
</tr>
<tr>
<td>Bellany (Lau)</td>
<td>137</td>
</tr>
<tr>
<td>Benford (Robert D)</td>
<td>53</td>
</tr>
<tr>
<td>Bett (Richard R)</td>
<td>187</td>
</tr>
<tr>
<td>Blacker (Coit D)</td>
<td>189</td>
</tr>
<tr>
<td>Black-Will (Robert D)</td>
<td>28</td>
</tr>
<tr>
<td>Blaker (James R)</td>
<td>211</td>
</tr>
<tr>
<td>Bora-Wski (John)</td>
<td>29</td>
</tr>
<tr>
<td>Boren (David), Gran (Jake) and Kupperman (Robert H)</td>
<td>151</td>
</tr>
<tr>
<td>Brady (Linda P)</td>
<td>205</td>
</tr>
<tr>
<td>Brayton (Abbott)</td>
<td>26</td>
</tr>
<tr>
<td>Birto (Dagobert) and Intriligator (Michael D)</td>
<td>197</td>
</tr>
<tr>
<td>Broz (I van)</td>
<td>40</td>
</tr>
<tr>
<td>Brzeniski (Zbigview)</td>
<td>167</td>
</tr>
<tr>
<td>Bundy (Mc Geogke et al)</td>
<td>141</td>
</tr>
<tr>
<td>Bunn (George) and Payne (Rodger A)</td>
<td>116</td>
</tr>
<tr>
<td>Burns (Richard D)</td>
<td>35</td>
</tr>
<tr>
<td>Burns (William P)</td>
<td>110</td>
</tr>
<tr>
<td>Burt (Richard)</td>
<td>34</td>
</tr>
<tr>
<td>Buteux (Paul)</td>
<td>105</td>
</tr>
<tr>
<td>Name</td>
<td>Page</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>------</td>
</tr>
<tr>
<td>BUTLER (Richard)</td>
<td>88</td>
</tr>
<tr>
<td>BYERS (R B)</td>
<td>186</td>
</tr>
<tr>
<td>BYRNE (Paul)</td>
<td>87</td>
</tr>
<tr>
<td>CHEEMA (Zafar Iqbal)</td>
<td>80</td>
</tr>
<tr>
<td>CHELLANEY (Brahma)</td>
<td>100</td>
</tr>
<tr>
<td>CHENGAPPA (BM)</td>
<td>99</td>
</tr>
<tr>
<td>CHERNDFF (Fred)</td>
<td>57, 67</td>
</tr>
<tr>
<td>COBBAN (Helena) and SMITH (Gerard C)</td>
<td>124</td>
</tr>
<tr>
<td>CODEVILLA (Anglo)</td>
<td>209</td>
</tr>
<tr>
<td>COFFEY (John W)</td>
<td>37</td>
</tr>
<tr>
<td>COHEN (Arner) and MILLER (Marrin)</td>
<td>113</td>
</tr>
<tr>
<td>CRDFT (Stuart)</td>
<td>128</td>
</tr>
<tr>
<td>DAALDER (IVD H)</td>
<td>178</td>
</tr>
<tr>
<td>DAHLITZ (Julie)</td>
<td>191, 194</td>
</tr>
<tr>
<td>DATT (Savita)</td>
<td>122, 125</td>
</tr>
<tr>
<td>DAIVS (Lynn E) and BROWN (Harold)</td>
<td>152</td>
</tr>
<tr>
<td>DEAN (Jonathan)</td>
<td>18, 92</td>
</tr>
<tr>
<td>DEUDNEY (Daniel)</td>
<td>85</td>
</tr>
<tr>
<td>DIXIT (Asbha)</td>
<td>23</td>
</tr>
<tr>
<td>DIXON (William J) and SMITH (Dale L)</td>
<td>203</td>
</tr>
<tr>
<td>DOUGHERTY (James E)</td>
<td>135</td>
</tr>
<tr>
<td>DUFFIELD (John) and FEIVESON (Harold)</td>
<td>184</td>
</tr>
<tr>
<td>DUMAS (Lloyd J)</td>
<td>41</td>
</tr>
<tr>
<td>DUNN (Levis A)</td>
<td>14</td>
</tr>
<tr>
<td>EBERSTADT (Mary Tedeschi)</td>
<td>204</td>
</tr>
<tr>
<td>EKSTEROWICZ (Anthony J)</td>
<td>165</td>
</tr>
<tr>
<td>EPSTEIN (Edward Jay)</td>
<td>208</td>
</tr>
<tr>
<td>EVANGELISTA (Mathew)</td>
<td>38, 60</td>
</tr>
<tr>
<td>EVERT (Philip P)</td>
<td>42</td>
</tr>
</tbody>
</table>
FAIRBANKS (Charles H. Jr) and SHULSKY (Abram N)  174
FASCELL (Dante B)  202
FEIVESON (Harold A) and DUFFIELD (John)  184
FESHBACH (Seymour) and WHITE (Michael J)  97
FINEL (Bernard I) and LAGON (Mark P)  163
FLANAGAN (Stephan J) and HAMILTON (Andrew)  173
FLOWERREE (Charles C)  5
FORSBERG (Randell)  36, 56
FREEDMAN (Lawrence)  27, 89
FREM (Ragnhild)  149

GALVIN (John R)  20
GARNETT (JC)  7
GARN (Jake), KUPPERMAN (Robert H) and BOREN (David)  151
GELLNER (Charles R) and RUSTEN (Lynn F)  201
GHOSH (SK)  72
GOLDBLAT (Jozef)  180
GOLDBLAT (Jozef) and MILLAL (Victor)  12
GOLDMAN (Emily O)  134
GRAY (Colin S)  176
GUFRTNER (Gary L)  64
GUNTER (Michael M)  148

HAASS (Richard N)  183
HAGERTY (Devin T)  120
HAMILTON (Andrew) and FLANAGAN (Stephan J)  173
HEDLIN (Myron)  168

IMAY (RYAKICHI)  157
INBAR (Efraim)  66
INTRILIGATOR (Michael D) and BRITO (Dagobert)  197
J
JACKSON (William D) 156
JERVIS (Robert) 3
JOHANSEN (Robert S) 129
JOHNSON (Paul G) 200
JONES (Philip) 51

K
KAISER (Karl) 33
KAMATH (PM) 61
KEARMS (Graham) 198
KEOHANE (Dan) 90
KHILNANI (Niranjan M) 121
KILGOUR (D Marc) 207
KIPP (Jacob W) 31
KOUBI (Vally) 6
KRAMER (Bernardm), MILDURN (Michael A) and WATANABE(Paul Y) 96
KRASS (Auan S) 158
KRELL (Gert) 170
KRUZEL (Joseph J) 136,143
KUMAR (A Prasanna) 101
KUPPERMAN (Robert H), BOREN (David) and GARN (Jake) 151

L
LAGON (Mark P) 163
LEE (Ki-faik) 47
LIBERMAN (Peter J) and THOMASON (Neil R) 77
LORD (Carnes) 132
LUTZ (Dieter S) 190

M
MACDONALD (Hugh) 21
MACK (Andrew) 181
MASON (David S) 164
MASON (RA) 17
MCCGWIRE (Michael) 112
HEYER (Stephen M) 193
MILBURN (Michael A), WATANABE (Paul Y) and KRAMER (Bernard M) 96
MILLER (Marrin) and COHEN (Arner) 113
MILLER (Steven E) 177
MILLAN (Victor) and GOLDBLAT (Jozy) 12
MOODIE (Michael) 30
MOORE (James W) 22
MOORTHY (P) 139
MULTAN (Wojeich) 55
MURAVCHIK (Joshua) 93
MURRY (Mathew) 179

N
NAVIAS (Marlin S) 171
NELSON (Linden) and BEARDSLEY (George L, Jr) 78
NEILD (Robert) 68
NEUMAM (Stephanie G) 199
NITZE (Paul H) 74
NYE (Joseph S, Jr) 4,144,160

O
OELRICH (Iran) 210

P
PARANJPE (Shrikant) 127
PASRICHACHI (PM) 70
PASTUSIAK (Longus) 50
PAUL (TV) 63
PAYNE (Rodger A) and BUNN (George) 116
PETERS (John) 24
PICK (Otto) 111,130
PIERAGOSTINI (Karl) 159
PILAT (Joseph) 195
PLOUS (Scott) 83
PRAN CHOPRA 118
PRASAD (Jayant) 49
PUGH (Michael C) 81
PURVER (Ron) 8

R
RAJAGOPALAN (Rajesh) 131
RAZVI (Mujtaba) 104
REFORD (Robert W) 175
REISS (Mitchell) 133
RENGGER (NJ) 65
REYNOLD (Harry L) 161
RITCHESON (Philip L) 102
RIVKIN (David B) 153
ROBINSON (JP Pessy) 13
ROGERS (Bernard W) 107
ROSAS (Allan) 15
ROSE (Clive) 82
ROSE (William M) 114
ROSS (Michael L) 59
ROSTOW (EugineX) 154
ROY CHAUDHURY (Rahul) 212

S
SABIN (Philip AG) 109,172
SAKAMOTO (Yoshikzu) 39
SCHANDLER (Harbar V) 140
SCHNEIDER (William Jr) 166
SEGAL (Gerald) 10
SETH (SPP) 71
SHAH (Prakash) 117
SHARP (Jan MO) 108
SHEEHAN (Michael) 196
SHULSKY (Abram N) 169
SHULSKY (Abram N) and FAIRBANKS(Charles H Jr) 174
SHULSKY (Abram N) and FAIRBANKS (Charles H,Jr) 174
SIGAL (Leon V) 94
SIMPSON (John) 19,123
SINGH (Ravindra Pal) 115
SLOCOMBE (Wallir B) 75,145
SMITH (Chris) 54
SMITH (Dale L) and DIXON (William J) 203
SMITH (Gerad C) and COBBAN (Helena) 124
SOKOLSKI (Henry) 149
STEWBRUNER (John) 1
STIVERS (William) 182
STOERTS (Howard Jr) 98
STOFFER (Howard) and ADENIRAN (Tunde) 2
SUBRAMANYAM 'K) 58,82
SUBRAMANYAM (RR) 103

T

TAI (Ming Ching) 43
TAYLOR (Theodore B) 91
TAYLOR (Trevor) 16
THEE (Marek) 45,76
THOMAS (Valerie) 138
THOMSON (James A) 142
THOMSON (Meil R) and LIBERMAN (Peter J) 77
TOYODA (Toshiyuki) 46
TOWLE (Philip) 48
TRITTEN (James J) 185
TYGART (CE) 95
TZANOS (Constantive P) 44

V

VERONA (Sergui) 86
W
WARNER (Edward L, III) 150
WATANABE (Paul Y), KRAMER (Bernard M) and MILBURN (Michael A) 96
WEISS (Seymour) 9
WENDT (James C) 25
WHITE (Michael J) and FESHBACH (Seymour) 97
WILLIAMS (Phil) 188
WINDASS (Stan) and BARNABY (Frank) 79
WINDOR (Philip) 69
WITTIG (Gernard) 126

Y
YOUNG (Elisabeth) and YOUNG (WAYLAND) 162
YOUNG (WAYLAND) and YOUNG (Elisabeth) 162

Z
ZIMMERMAN (Peter D) 146
ZUBERI(M) 119

****
<table>
<thead>
<tr>
<th>TITLE</th>
<th>ENTRY NO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa and arms control : a new perspective</td>
<td>2</td>
</tr>
<tr>
<td>After two tracks : integrating START and INF</td>
<td>142</td>
</tr>
<tr>
<td>Airpower in conventional arms control</td>
<td>17</td>
</tr>
<tr>
<td>Amalogy for arms control</td>
<td>137</td>
</tr>
<tr>
<td>Another perspective on Marxism-Leninism and arms control.</td>
<td>206</td>
</tr>
<tr>
<td>Anti-Satellite weapons and arms control : incentives and disincentives from the Soviet and American perspectives</td>
<td>193</td>
</tr>
<tr>
<td>Arms and intelligence</td>
<td>209</td>
</tr>
<tr>
<td>Arms control</td>
<td>150</td>
</tr>
<tr>
<td>Arms control after cold war</td>
<td>4</td>
</tr>
<tr>
<td>Arms control and American can defence policy: new alternatives and old realities</td>
<td>136</td>
</tr>
<tr>
<td>Arms control and disarmament : terms and resources</td>
<td>35</td>
</tr>
<tr>
<td>Arms control and European Security : Completing connections for the 1980's</td>
<td>188</td>
</tr>
<tr>
<td>Arms control and its calamities</td>
<td>204</td>
</tr>
<tr>
<td>Arms control and Managing Linkage</td>
<td>200</td>
</tr>
<tr>
<td>Arms control and NATO deterrence</td>
<td>107</td>
</tr>
<tr>
<td>Arms control and preventions of war</td>
<td>160</td>
</tr>
<tr>
<td>Arms control and stability in Europe : reductions are not enough</td>
<td>173</td>
</tr>
<tr>
<td>Arms control and the Carter administration: the management of contradictions</td>
<td>205</td>
</tr>
</tbody>
</table>
Arms control and the evolution of super power relations 203
Arms control at sea: the United States and the Soviet Union in the Indian ocean, 1977-78 183
Arms control: crisis or compromise 1
Arms control dialogue 37
Arms control does not control arms 176
Arms control, European Security and the future of the western alliance 67
Arms control in Asia 10
Arms control in Central America 12
Arms control in outer space 194
Arms control in South Asia 140
Arms control, International Soviet, and the end of the cold war 65
Arms control in the 1980's 151
Arms control in transitions: the Reagan administration's legacy 110
Arms control, stability, and causes of war 2
Arms control: the contribution of politics by other means 134
Arms control verification: Cooperating reduce uncertainty 159
Arms for peace: a non-proliferation primer? 149
Arms limitation and the situation in the Asian-Pacific and Indian ocean regions 11
ASAT and related weapons: proposals for the prevention of an arms race in outer space 191

Balance of power foundation for contemporary arms control praxis 165
Ballistic missile proliferation in the Middle East

Beware of 'counterfeit' unilateral [US] initiatives

Beyond the mind set of deterrence to genuine disarmament

Blind eye to nuclear proliferation

Britain and the nuclear arms control process in the 1980s

British approaches to nuclear arms control and disarmament

Case against arms control

Confining the military to defence as a route to disarmament

Cooperation theory and disarmament negotiation in the 1950s

Cooperative denuclearization : NPT safeguards and India's nuclear strategy

Conventional arms control: an analytical survey of recent literature

Convention of Chemical Weapons Control : hard evices and胳膊 control

CND and dogma: the future of multilateral arms transfers restraint

Challenge of nuclear arms control in South Asia

Case against arms negotiations and for reconsideration of strategy

CAT and dogma: the future of multilateral arms transfers restraint

Cooperation theory and disarmament negotiation in the 1950s

Cooperative denuclearization : NPT safeguards and India's nuclear strategy

Conventional arms control: an analytical survey of recent literature
Conventional arms control - a threat to arms procurement?  
Conventional arms control for Korea: a proposed approach  
Conventional arms control in Europe  
Conventional arms control: the future agenda  
Conventional disarmament - A legal framework and some perspective  
Conventional stability talks: specific approaches to conventional arms control in Europe  
Costs of disarmament treaties: a research note  
Current soviet views on conventional arms control in Europe  
Czechoslovak Socialist republic and disarmament: prolife of the year 1971-81  

D  
Defining long term western objectives in CFE (conventional Armed Forces in Europe)  
Denuclearization of South Asia  
Dimensions of Soviet arms control policy  
Diplomacy of compliance and modern arms control: problems of third party participation  
Disarmament and development in China: the relationship between national defence and economic development  
Disarmament and economy in advanced industrialized countries - the US and the USSR  
Disarmament and military decline  
Disarmament, arms control and East-West relation  
Disarmament at Sea
Disarmament issues in the foreign policy of people's Poland 55
Disarmament on the Korean peninsula and the position of the four major powers 47
Disarmament, peace movement and the united world 54
Disinformation; or, why the CIA cannot verify an arms-control agreement 208
Doves, nawks, and detente 182

E

Effect of missile technology control regime and multilateral politics of North-East technology transfer 115
Establishment of an international disarmament fund for development - A feasibility study 45
Estimation of optimum force size and force reduction potential in conventional arms reduction negotiations 22
European security and the INF dilemma: is there a better way? 106
Export controls and North-South controversy 62

F

Farewell to arms control 144
Force posture consequences of the START treaty 145
Forgoing missiles into spaceships 85
Frame disputes with in the [US] nuclear Disarmament movement 53
Form "arms control" to arms reductions: the historical experience. 174
From Rush-Bagot to START: the lessons of arms control 143
Future of arms control 129
Future of arms control 129

G

Geneva disarmament negotiations as a learning process 86

Gore proposal: a passage through the impasse of nuclear arms control? 148

H

How serious is Gorbachev about arms control 111

How to think about and implement nuclear arms control in the middle east 113

I

Immediate agenda for arms control. 75

Indian ocean and south Asian states. 104

(Indian) nuclear – debate. 101

India's nuclear programme 72

India China Relations: issues and implications 99

India's nuclear status: a policy note 127

Indo-Pak nuclear accord 70

Indo-Pak nuclear duel and the united states 71

India Vs Pakistan: the nuclear option 103

Influence through arms transfer: lessons from US-Pakistani relationship 63

INF negotiations and the prospect for nuclear arms control in Europe 105

Intelligence and arms control policy 169

International relations theory and European conventional arms control: practical linkages 24

International tensions and arms control agreements 6

Is there is a future for nuclear weapons? 112

Israel and arms control 66
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>L</td>
<td>Learning from GATT: lessons for arms control</td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>Logic of American arms control dogma: lesson from Carter and Bush experiences</td>
<td>163</td>
</tr>
<tr>
<td>M</td>
<td>Maximum - Lininism and arms control</td>
<td>162</td>
</tr>
<tr>
<td></td>
<td>MBFR and conventional forces reduction in Europe</td>
<td>26</td>
</tr>
<tr>
<td></td>
<td>Mid-East peace plan: why arms control need top billing?</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Military security in Europe</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>Monitoring a nuclear freeze</td>
<td>98</td>
</tr>
<tr>
<td></td>
<td>More inane congress: twelve years of MBFR</td>
<td>196</td>
</tr>
<tr>
<td></td>
<td>Moscow's line on arms control</td>
<td>168</td>
</tr>
<tr>
<td></td>
<td>Multiple approaches to arms control and disarmament</td>
<td>82</td>
</tr>
<tr>
<td>N</td>
<td>National arms control policy for the 1980's</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>National [US] strategy and arms control</td>
<td>167</td>
</tr>
<tr>
<td></td>
<td>Nature and sources of [US] attitudes toward a nuclear freeze</td>
<td>96</td>
</tr>
<tr>
<td></td>
<td>Naval arms control and confidence building for North-East Asian Waters</td>
<td>181</td>
</tr>
<tr>
<td></td>
<td>Negotiating security and disarmament in Europe</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td>Negotiating security: BMFR experience</td>
<td>189</td>
</tr>
<tr>
<td></td>
<td>Negotiations in chemical warfare arms control</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>New Conventional weapons technologies and unconventional disarmament</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>New dimentions of disarmament processes</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td>New directions for arms control</td>
<td>161</td>
</tr>
<tr>
<td></td>
<td>New book at Naval arms control</td>
<td>185</td>
</tr>
<tr>
<td></td>
<td>New Soviet approach to security</td>
<td>60</td>
</tr>
</tbody>
</table>
No First use unknowlabe 77
Non-aligned view of disarmament 49
Non-armageddon solutions to the arms roll 197
NPT and non-nuclear weapon states: options and non-options 125
Nuclear arms and arms control at sea 139
Nuclear arms control: where do we stand? 152
Nuclear diplomacy in South-Asia during the 1980's 80
Nuclear disarmament: does Australia have a role? 88
Nuclear clear explosions 147
Nuclearization in South Asia 102
Nuclear non-proliferation implications and NPT review: an Indian perspective 117
Nuclear non-proliferation in post cold war era 123
Nuclear war and nuclear disarmament 44
Nuclear weapon development and Geneva talks 79

O
Objective of arms control 74
Obstacles to a stable disarmed peace: and how to set out priorities to overcome them 56
On lending arms control agreement 5
On site inspections: the military significance of an arms control proposal 211
Our seat at the table: a Canadian menu for arms control 175

P
Paradoxes and pre-dicaments of nuclear weapons 73
Participants in the nuclear weapons freeze movement 95
Perils of a nuclear freeze 93
Perspectives of disarmament and detente in Europe after the INF treaty 52
Policies and national security: American influence on Indian thinking 61
Politics of conventional arms control 27
Politics over promise: domestic impediments to arms control 177
Power of suggestions: opaque proliferation, existential deterrence and the South-Asian nuclear arms competition 120
Practice and theory in Soviet arms control policy 130
Presidents choice: Star wars or arms control 141
Problems and achievements of arms control 170
Problems of our nuclear disarmament: arms control in crisis 76
Procedural alternative for arms control 179
Production monitoring for arms control 210
Proposals and propaganda: arms control and British public opinion in the 1980's 172
Psychological and Strategic barriers in present attempts at nuclear disarmament: a new proposal 23

Q
Quota testing 146

R
Regional stability and weapons proliferation in South Asia 212
Relevance of arms in the 1980's 34
Risks associated with unverifiable arms control treaties 7
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road to Geneva</td>
<td>166</td>
</tr>
<tr>
<td>Role of arms control in the new Europe</td>
<td>178</td>
</tr>
<tr>
<td>Role of united Nations in arms control: an assessment</td>
<td>180</td>
</tr>
<tr>
<td>Romanian autonomy and arms control policies</td>
<td>164</td>
</tr>
<tr>
<td>Sea power and arms control: problems and prospects</td>
<td>186</td>
</tr>
<tr>
<td>Security and arms control at the policies</td>
<td>8</td>
</tr>
<tr>
<td>Should INF and START be merged? A historical perspective</td>
<td>109</td>
</tr>
<tr>
<td>SIA [Structural inability to launched an attack] and Defensive zones</td>
<td>190</td>
</tr>
<tr>
<td>Site selection for onsite inspection in arms control</td>
<td>207</td>
</tr>
<tr>
<td>Some notes on the connectin between disarmament and human rights</td>
<td>42</td>
</tr>
<tr>
<td>Some thoughts on conventional arms control</td>
<td>20</td>
</tr>
<tr>
<td>Soviet approach to nuclear arms control: continuity and change</td>
<td>153</td>
</tr>
<tr>
<td>Soviet leadership succession and the politics of arms control compliance</td>
<td>64</td>
</tr>
<tr>
<td>Soviet military doctring and conventional arms control</td>
<td>31</td>
</tr>
<tr>
<td>Soviet position on nuclear arms control and limitations</td>
<td>155</td>
</tr>
<tr>
<td>Space wars</td>
<td>192</td>
</tr>
<tr>
<td>Star peace: Soviet space arms control strategy and objective</td>
<td>195</td>
</tr>
<tr>
<td>Stopping the seabased counter force threat</td>
<td>184</td>
</tr>
<tr>
<td>Struggle for disarmament</td>
<td>58</td>
</tr>
<tr>
<td>Systems for peace or causes of war? Collective security, arms control, and the new Europe</td>
<td>187</td>
</tr>
</tbody>
</table>
Tit-for-tat and the negotiation of nuclear arms control 116
Towards a hierarchy for arms control 69
Towards a nuclear free world 118
Towards an interdisciplinary model of barriers to nuclear arms control 78
Towards conventional stability in Europe? 29

[UK] campaign for nuclear disarmament: the resilience of protest group 87
Understanding the INF debacle: arms control and alliance cohesion 108
Unilateral nuclear disarmament at sea 81
United states arms control and disarmament agency: data on management, personnel, budget, status, and related matters 201
US and Indian non-proliferation objectives and concerns 122

Verifications and trust in arms control 158
Verifications in arms control: Beyond NTM 156
Verification of limits on long-range nuclear SLCM's 138
Verification: reforming a mealogy 132
Verified elimination of nuclear war heads 91

Warming to the freeze 94
Who in middle town supports a nuclear freeze? 97
Why the Soviets want an arms control agreement, and why they want it now 154

************
<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABM</td>
<td>Anti-Ballistic Missile</td>
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<td>CDI</td>
<td>Conventional Defence Initiatives</td>
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<td>CIA</td>
<td>Central Intelligence Agency.</td>
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<td>CND</td>
<td>Campaign for Nuclear Disarmament.</td>
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<td>CW</td>
<td>Chemical Warfare</td>
</tr>
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<td>GATT</td>
<td>General Agreement on Trade and Tariff.</td>
</tr>
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<td>IAEA</td>
<td>International Atomic Energy Association.</td>
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<td>ICBM</td>
<td>Intecontinental Ballistic Missile</td>
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<td>INF</td>
<td>Intermediate Nuclear Forces.</td>
</tr>
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<td>IRBM</td>
<td>Intermediate Range Ballistic Missile</td>
</tr>
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<td>LSN</td>
<td>Low Silence Nuclear</td>
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<td>MAD</td>
<td>Mutual Assured Destruction.</td>
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<td>MBFR</td>
<td>Mutual and Balanced Force Reduction.</td>
</tr>
<tr>
<td>MTCR</td>
<td>Missile Technology Control Regime</td>
</tr>
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<td>NATO</td>
<td>North Atlantic Treaty Organization.</td>
</tr>
<tr>
<td>NFW</td>
<td>Nuclear Free World</td>
</tr>
<tr>
<td>NNWS</td>
<td>Non-Nuclear Weapons States.</td>
</tr>
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<td>NPT</td>
<td>Non-Nuclear Proliferation Treaty.</td>
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<td>NSA</td>
<td>National Security Agency.</td>
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<td>Nuclear Weapons States.</td>
</tr>
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<td>PTBT</td>
<td>Partial Test Ban Treaty.</td>
</tr>
<tr>
<td>SALT</td>
<td>Strategic Arms Limitation Talks.</td>
</tr>
<tr>
<td>SDI</td>
<td>Strategic Defence Initiatives.</td>
</tr>
<tr>
<td>SLBM</td>
<td>Soviet Submarines Lanced Ballistic Missiles.</td>
</tr>
<tr>
<td>SLCM</td>
<td>Sea Launched Cruise Missiles</td>
</tr>
<tr>
<td>SLOC's</td>
<td>Sea lines of Communication</td>
</tr>
</tbody>
</table>
SMO : Social Movement Organization
SSBM : Submarine, Ballistic, Nuclear
START : Strategic Arms Reduction Talks-