

January 1985

Volume 22

No. 3

# *Pugwash Newsletter*

issued quarterly by the Council of the Pugwash Conferences on  
Science and World Affairs

PUGWASH NEWSLETTER

Vol. 22 No. 3 January 1985

Editor : M. M. Kaplan

---

C O N T E N T S

	<u>Page</u>
Editorial : East, West and South	81
Eleventh Pugwash Workshop on Nuclear Forces, Geneva, Switzerland, 15-16 December 1984.	
List of Participants	82
Statement of the Pugwash Executive Committee	83
Personal Observations by John P. Holdren	85
The Nuclear Arms Race, Its Causes and Remedies by Victor F. Weisskopf	88
Third Pan-African Pugwash Symposium : African Security, Cairo, Egypt, 31 October-3rd November 1984.	
List of Participants	93
Report of the Symposium	94
Security and Peace-Keeping in Africa, by Dr. Boutros Ghali	102
Abstracts of Working Papers by:	
S.N. MacFarlane	105
A.R. Sidky	105
Y.A. Eraj	106
Election of PAP Steering Committee and Convener	107
Student/Young Pugwash - 1985	108
Book Review	109
Notices on Other Publications	110
25th Anniversary of VDW	110
Central Office in London	110
Obituaries	111
International Year of Peace 1986	111
Calendar for Future Pugwash Meetings	112

EAST, WEST AND SOUTH

Since our Conference in Björkliden last July we have held two quite different types of meetings - one in Geneva and the other in Cairo. Pershing IIs and SS-20s may seem far from the starvation, conflicts and social tensions in Africa, but the interactions of both sets of problems were brought out in the Pugwash meetings late last year. It was painfully apparent, however, that Africa is much more affected by the northern colossi than vice versa.

Geneva

Our 11th Workshop on Nuclear Forces is covered in the following pages. Several facets of the meeting are particularly noteworthy. It was held on 15 and 16 December which followed the re-election of President Reagan the preceding month, and in the shadow of the Gromyko-Shultz talks in January. The timing was therefore appropriate for focusing on short and medium-term steps, politically and militarily, that could be taken to stabilize the international tensions created by the NATO/WTO impasse, while the USA and USSR talked about future talks which could not be expected to yield substantive results for an appreciable time.

The statement of the Pugwash Executive Committee (p. 83) and John Holdren's personal account (p. 85) characterize very well the flavour and result of the discussions in which a wide spectrum of views were represented. These ranged from the polarized NATO/WTO stands, and their justification, to Victor Weisskopf's forceful proposals for European initiatives representing both East and West camps, but more independent of the superpowers (p. 88).

Cairo

The Third Pan African Pugwash Symposium which concerned African Security was gratifyingly successful, thanks to the dedication of Essam Galal and his team who bore the brunt of organizing it. The Symposium was opened by the Prime Minister of Egypt, Mr. Kemal Hassan Ali, and several sessions were attended by the Minister of State for Foreign Affairs, Dr. Boutros Ghali, who has been a strong supporter of Pugwash. His paper is reproduced on pp. 102-4.

The report of the Symposium (p. 94) was a synthetic of discussions held in three working groups. The first dealt with the global crisis, especially East-West, and its linkage to African security from the standpoint of military facilities and bases in Africa; the second group reviewed economic development, education and food security; and the problem of Southern Africa and Namibia was covered in the third group.

The need for crisis prevention and control mechanisms to deal with the turbulent situation in Africa received much attention in the working groups and plenary sessions. Neil MacFarlane's background paper on the subject (p. 105) provided an excellent basis for the discussions. A principal recommendation of the Symposium was for Pugwash, in collaboration with the Organization for African Unity (OAU), to develop such mechanisms as a matter of urgency.

The meetings in Geneva and Cairo are important stepping-stones on the long hard road to achieve a stable peace and social justice.

M.M. Kaplan

ELEVENTH PUGWASH WORKSHOP ON NUCLEAR FORCES

Geneva, Switzerland, 15-16 December 1984

List of Participants

Gen. Wolf Graf von Baudissin  
former Director, Institut für  
Friedensforschung und Sicher-  
heitspolitik, University of Hamburg,  
FRG.

Brig.-Gen. G.C. Berkhof  
Netherlands Institute of Inter-  
national Relations,  
Netherlands.

Prof. A. Boserup  
Professor of Political Science,  
University of Copenhagen, Denmark.

Prof. F. Calogero  
Professor of Theoretical Physics,  
University of Rome, Italy.

Ms Chen  
Second Secretary, Permanent Mission  
of China to the UN, Geneva,  
Switzerland.

Capt. D. Clarke USN  
International Military Staff, NATO,  
Brussels, Belgium.

Lieut.-Col. M. Coccia  
Italian Army Staff, Rome, Italy.

Prof. M. Dobrosielski  
Professor of Philosophy, University  
of Warsaw; former Deputy Foreign  
Minister, Poland.

Dr. E. Eppler  
Member of Executive of SPD.  
Stuttgart, FRG.

Prof. B.T. Feld  
Professor of Physics, M.I.T.,  
Cambridge, Mass., USA.

Ms Feng  
First Secretary, Permanent Mission  
of China to the UN, Geneva,  
Switzerland.

Prof. Jacques Freymond  
Hon. Director, Institut  
Universitaire de Hautes Etudes  
Internationales, Geneva,  
Switzerland.

Gen. Fricaud-Chagnaud  
president, Fondation pour les Etudes  
de Défense Nationale, Paris,  
France.

Dr. K. Frydenlund  
Member of Norwegian Parliament,  
former Foreign Minister, Oslo,  
Norway.

Dr. E.E. Galal  
Member of Pugwash Executive  
Committee, Cairo, Egypt.

Professor Dorothy Hodgkin  
President of Pugwash,  
University of Oxford, UK.

Prof. J.P. Holdren  
Professor of Energy Resources,  
University of California, Berkeley,  
USA.

Lieut.-Gen. T. Huitfeldt  
Director, International Military  
Staff, NATO, Brussels, Belgium.

Dr. M.M. Kaplan  
Secretary-General, Pugwash, Geneva,  
Switzerland.

Dr. J. Klein  
Institut Français des Relations  
Internationales, Paris, France.

Col. W. Mark  
Military Department, Bern,  
Switzerland.

Acad. M.A. Markov  
USSR Academy of Sciences,  
Moscow, USSR.

Prof. J.K. Miettinen  
Dept. of Radiochemistry,  
University of Helsinki, Finland.

Dr. J. Steinbrunner  
The Brookings Institution,  
Washington, DC, USA.

Professor M. Nalecz  
Director, Inst. of Biocybernetics  
and Biomedical Engineering,  
Polish Academy of Sciences,  
Warsaw, Poland.

Dr. J-P. Stroot  
Institut Interuniversitaire des  
Sciences Nucléaires,  
Brussels, Belgium.

Dr. V.P. Pavlichenko  
Disarmament Committee,  
Academy of Sciences, Moscow, USSR.

Dr. P. Weinzierl  
Dept. of Physics, University of  
Vienna, Austria.

Dr. M. Roche  
Member of the Pugwash Council,  
Caracas, Venezuela.

Prof. V.F. Weisskopf  
Professor of Physics, M.I.T.,  
Cambridge, Mass., USA.

Prof. J. Rotblat  
Emeritus Professor of Physics  
London, UK.

Dr. M.S. Wionczek  
Member of Pugwash Executive  
Committee, Mexico City,  
Mexico.

Prof. J. Ruina  
Professor of Electrical Engineering  
M.I.T., Cambridge, Mass., USA.

Gen. W.Y. Smith  
former Deputy Commander,  
US European Command,  
Washington, DC, USA.

Lord Zuckerman  
former Chief Scientific Advisor,  
British Government, U.K.

---

#### STATEMENT OF THE PUGWASH EXECUTIVE COMMITTEE

The 11th Pugwash Workshop on Nuclear Forces was held in Geneva, Switzerland, on 15 and 16 December 1984. Participants in the Workshop comprised 35 scientists and public and military figures from 18 countries. This meeting continued the series initiated in January 1980, which has been concerned with medium-range (intermediate) nuclear forces and their relation to strategic and conventional forces.

The purpose of this latest discussion was to assess the problems and prospects of nuclear arms control - both the opportunities for agreement and the consequences of failure - as the date of new of-

ficial talks in Geneva on this topic approaches. Among the subtopics discussed were: factors driving the nuclear arms race and associated principles for halting and reversing it; the probable consequences of failing to act promptly to stop the most troublesome trends and developments; specific steps towards - and elements of - a possible early agreement; and roles for Europe in pursuing a reduction of the nuclear danger.

The participants in this meeting took part as individuals, not as representatives of their governments or other agencies. The present statement was prepared following the

Workshop by the Executive Committee of the Pugwash Council, which has sole responsibility for its contents. It should not be interpreted as a consensus of the Workshop participants, among whom a wide range of views was represented.

Several points we have made before deserve re-emphasis now. The only function of nuclear weapons that cannot be accomplished less dangerously in other ways is deterring others who possess them from using theirs, and for this purpose both sides have more than enough of them. Neither side can destroy the other without being destroyed in return. This mutual and total vulnerability is understandably the cause of great uneasiness on all sides, but no amount of dismay about it can alter two fundamental facts: first, by eliminating any possible incentive for a nuclear attack, it continues to provide a form of stability in time of crisis; second, there are no weapons deployments or developments in sight - either offensive or defensive - that can change this mutual vulnerability.

Although neither side today has even a remote prospect of acquiring the capacity to inflict a disarming first strike on the other, there are deep dangers in deployments and developments that move even slightly in that direction. Such steps - and a number of programmes underway on both sides fit this description - arouse mutual suspicions about intentions, contributing to the general atmosphere of fear and mistrust; they increase the chance of nuclear war by mistake, miscalculation, or uncontrollable escalation; they provoke reactions that continue the arms race and further increase the chance of nuclear war by mistake, miscalculation, or uncontrollable escalation; they provoke reactions that continue the arms race and further increase the

danger; and they perpetuate a pattern of nuclear-weapon-state disregard for their obligations under the Non-Proliferation Treaty that is threatening the entire non-proliferation regime.

The forthcoming Geneva meeting between Secretary of State Shultz and Foreign Minister Gromyko to discuss new negotiations on the whole range of questions concerning nuclear and space weapons represents an historic opportunity. It is now necessary - and it should be possible - for the political leaders at this high level to agree once and for all on the basic principles that provide the foundation for arms limitations in our mutual interest, namely: that nuclear weapons have no functions for which existing nuclear forces are not more than adequate; and that both sides have nothing to gain (but everything to lose) from further deployments that move in the direction of a first-strike capability. Genuine agreement on these points would lead directly to mutual acceptance of a number of specific ingredients of a new arms control framework, including: a ban on further development and deployment of anti-satellite weapons; a recommitment to and strengthening of the ABM Treaty; and a comprehensive ban on testing of nuclear explosives (CTB). These elements could and should be made effective immediately by implementing them as reciprocal independent initiatives, eliminating the historic problem of continuing dangerous activities while talks are underway.

It should also be possible to terminate ongoing deployments of nuclear weapons on both sides by means of reciprocal moratoria, pending negotiation of an agreement on reductions. The destabilizing trend towards increased accuracy of land-based and submarine launched ballistic missiles likewise should

be stopped by moratoria on flight testing of such missiles. (Details such as provision for occasional flight testing of types already deployed could then be negotiated.)

It must be emphasized that keeping all of these potential accomplishments within reach requires refraining from any further weaponization of space. Anti-satellite weaponry and space-based ballistic missile defence are sufficiently closely related that stopping the former requires stopping the latter. Failure to stop them both will make any meaningful arms control impossible, as Bundy, Kennan, McNamara and Smith have argued so persuasively in the Winter 1984 issue of **Foreign Affairs** .

We consider the weaponization of space destructive of any hope for arms control **despite** our strong conviction, based on our review of the scientific facts, that there is no prospect for decades (at least) that space-based or other ballistic-missile defence can protect our societies from nuclear attack. The problem is that the mere pursuit of such defensive technologies would destroy the most enduring and valuable arms-control treaties in existence (the ABM Treaty, the Partial Test Ban, and the Outer Space Treaty) and would provide further

fuel for the worst-case-assessment syndrome that has driven much of the nuclear arms race to date. The unratified but nonetheless observed SALT II restraints would be an early casualty of an unprecedented expansion of offensive nuclear weaponry pursued as "insurance" against the possibility of partially effective defences.

We wish to emphasize, finally, that the danger of nuclear war is not simply a matter of the characteristics of nuclear forces and doctrines governing their uses; it is a matter of the **interaction** of these with international politics, public and decision-maker perceptions, and other factors. Reducing the danger therefore depends as much on political measures as on technical ones. In particular steps to diminish the level of mutual fear and mistrust, and to develop areas of scientific, cultural, and economic exchange and cooperation are now essential. Both in these respects and in seeking limitations on the military competition, we believe the nations of eastern and western Europe should play an expanded role. The common cultural background and the mutual economic and scientific interests of Europeans provide an excellent basis for independent cooperative initiatives by these countries.

---

THE ELEVENTH PUGWASH WORKSHOP ON NUCLEAR FORCES:  
PERSONAL OBSERVATIONS

John P. Holdren

As the statement of the Pugwash Executive Committee (reprinted above) indicates, the eleventh in the series of Pugwash Workshops in Geneva on medium/intermediate-range nuclear forces and their relation to strategic and conventional forces

took place almost on the eve of the meeting of the US and Soviet Foreign Ministers in the same city. The renewed public interest in arms control brought about by the prospect of new official talks after a drought of more than a year was re-

flected in the exceptional attendance and vigorous questioning at the December 17 Press Conference, where representatives from the Executive Committee presented its Statement on the Workshop. Radio and television interviews with some of the participants following the Press Conference were widely aired in the United States and, presumably, elsewhere.

Notwithstanding this intensified interest, opinion polls show that most members of the public are not expecting much from the new official talks in early January. Perhaps they have been persuaded by both past experience and current rhetoric that arms control is so inherently difficult as to preclude any escape from the familiar pattern of interminable haggling leading to (at most) modest restraints on the nuclear-weapons programmes on both sides (which, in any case, proceed unimpeded while the negotiations drag on). Possibly an even more cynical view - that arms control talks serve mainly to placate wishful thinkers, while hard-nosed planners get on with the technological arms race on which both sides actually stake their security - has gained more adherents in the past few years.

In any case, such pessimism about arms control is both deeply unfortunate and downright pernicious. It is unfortunate because it reflects a profound and widespread misunderstanding about what can and must be accomplished by arms control to reduce the danger of nuclear war. It is pernicious because low public expectations of arms control permit political leaders to deliver correspondingly modest results without serious embarrassment or loss of credibility. Low expectations and poor performance are linked in a vicious circle.

In this context, a series of un-

official, private, expert workshops - the Pugwash series on nuclear forces, in particular - has at least four useful roles to play. Two of these roles relate to what I would call the "details" of nuclear arms control, and two relate to "principles".

With respect to details, the first role is the generation of "early warning" of emerging problems arising from the characteristics of new weapons technologies and the interaction of these characteristics with military and political postures and doctrines. This role includes clarifying what aspects of each side's forces and posture are seen as most threatening by other parties, and why, as well as anticipating the kinds of reactions that various prospective actions might stimulate. The second "details" role is the generation and examination of ideas for solving specific arms control problems - i.e., how to count, limit, and reduce specific classes of weapons; how to deal with geographic asymmetries; how compliance could be verified and disputes resolved; and so on.

As useful as the treatment of such "details" in Pugwash workshops can be, it invariably turns out that about half of the discussion time is spent on the broader "principles" of the nuclear arms race and arms control. This happens spontaneously, irrespective of what is on the written agenda, and the Eleventh Nuclear Forces Workshop was no exception. Participants sometimes lament this tendency to belabour the broadest issues, considering it a waste of time; but I believe that the continuing tendency to return to basics is neither accidental nor wasteful. It is, instead, an appropriate reaction to a fundamental reality; the most serious obstacle to progress in arms control is not that the details of types and lo-

cations of weapons are too complex or that prescriptions for halting and reversing adverse trends are lacking; the main obstacle is rather lack of understanding and agreement - among serious analysts and policy makers as well as in the public - about the basic principles that govern the nuclear confrontation and shape what must and can be done to reduce the nuclear danger.

The main debates between "hawks" and "doves" in the USA, for example, really have less to do with the verifiability of specific elements of a nuclear freeze or the relative merits of different versions of build-down (although often the arguments appear in these guises) than with more fundamental, conceptual disagreements: Are present technological trends in nuclear weaponry making us more safe or less safe? Is the chance of finding an escape from the dilemmas of nuclear deterrence through defensive technology worth the costs and risks of seeking it? Is the security of the USA and its allies better served by terminating the nuclear arms race or by pursuing it? Is it prudent policy to threaten first-use of nuclear weapons against conventional attacks by potential adversaries? It may be presumed that similar disagreements are not unknown in the Politburo.

The continuing failure to adopt effective policies dealing with the "details" of arms control is, in my

view, largely a consequence of such underlying disagreements about principles. To the extent that this is so, the recurring discussions of these conceptual issues in Pugwash workshops have two useful functions. First, they can help to clarify the thinking and sharpen the arguments of the participants themselves, who by virtue of their positions as advisers, decision makers, and opinion leaders in their respective countries and blocs can play important roles in developing the needed consensus about the principles germane to arms control.

Second, the workshop discussions are reflected directly in the formal statements prepared by the Pugwash Executive Committee for distribution to decision makers worldwide and, through the media, to the public. The continuing emphasis, in these statements, on the most fundamental principles - the unattainability of meaningful military advantage through acquisition of more and "better" nuclear weapons, the hazards of pursuing the unattainable, the opportunities for riskless restraint inherent in the excessive sizes of existing arsenals - helps to provide a basis for critical questioning of existing and proposed policies incompatible with these principles, contributes to the creation of a receptive context for constructive proposals, and helps to offset countervailing messages about "not expecting too much" from arms control.

---

THE NUCLEAR ARMS RACE, ITS CAUSES AND REMEDIES

by Victor F. Weisskopf

(Ed. Note: Due to space limitations, we reproduce here a shortened version of Professor Weisskopf's paper. The full text will be supplied on request to the Pugwash Executive Office in Geneva. Additional working papers for the Workshop were submitted by Jorma K. Miettinen on "Global and European Goals for Arms Control Negotiations between the United States and the Soviet Union", and by Francesco Calogero on "Prospects for Arms Control and Détente". Copies of these are also available on request.)

At this moment in history the two superpowers are on a collision course. The nuclear armaments race goes at an accelerated rate, more warheads are deployed, the missiles are becoming more efficient and new types of weapons are introduced. Our own security and the security of the whole world diminishes. The consequences of a potential military conflict become more terrible with every new turn of the arms race spiral. The technical advances make the deployment of new weapons much harder for the other side to verify in arms control agreements, and the increasing number of weapons increases the probability of an intended or unintended outbreak of nuclear war.

Today negotiations between the superpowers to stop and reduce this absurdity are rare and quixotic. For example, the recent negotiations about intermediate missiles in Europe dealt with number of missiles that are only a few per cent of the available nuclear forces. What military difference does it make if one side has a few more or less of one type or the other?

Why is it impossible today to stop and reverse the nuclear arms race?

The reason is fear. There are many fears. For example, there is the fear of a first strike by the opponent which may destroy most of the missiles before retaliation. This

fear is completely irrational, because the USA has more than half and the USSR has about a quarter of their strategic missiles on submarines which cannot be destroyed by a first strike since there exists so far no means to locate submerged submarines. Remember what destructive power resides even in one single submarine. It will take a long time until all submerged submarines can be located, tracked and destroyed. To be sure, it cannot be excluded after a few decades. As in all cases of possible future technological successes it does not make sense to count on them today. If the chances of a nuclear war will be greatly diminished within the next decades, there will be no opportunity to make use of a technical breakthrough.

Then there is the fear of being weaker than the other side. Up to the mid-seventies the USA had considerably more nuclear weapons, although the Soviet Union had enough to destroy the USA even in a second strike. Since then the Soviet Union has reached approximate equality by an accelerated production effort. This build-up caused a psychological shock to the USA from which they have not yet recovered and which contributed to an increased feeling of insecurity. Remember that the Cuban missile crisis in 1962 was solved peacefully only because the USA had a vast nuclear superiority at that time.

The present approximate parity adds the pressure for a continuing arms race because it is difficult to estimate the efficiency and accuracy of warheads deployed by the other side, in particular in the Soviet Union, due to its exaggerated secrecy measures. Each side feels obliged to assume the worst and tries to catch up with its most pessimistic estimates. This is one of the driving forces of the race, in spite of the obvious fact that any real or perceived difference in numbers is irrelevant in view of the immense overkill capacities on both sides.

There is also the fear of being out-distanced in a specific type of weapon. For example, the Soviet Union has more land-based inter-continental missiles than the USA, and some have much larger explosive power. That is by no means an advantage for the Soviet Union. Land-based missiles are easily targetable and therefore exposed to a first strike. Furthermore, the destructive effects are less than proportional to the explosive power. Still the USA feel that they have to overcome that apparent deficiency, for example, by adding MX missiles. The Soviet Union is behind in submarine-based warheads, so it feels it must construct more of them. These are only two examples of differences between the strategic asymmetries which fuel the arms race. So the race continues without any real sense and purpose, since both sides have far more than enough to deter any attack.

Another fear comes from a perceived or an actual aggressiveness of the opponent. Both sides believe that the other side is bent on aggression whereas they themselves act purely defensively. This is a destabilizing condition. A misinterpretation of actions by the opponent can lead to an escalating conflict

or to war during a deepening crisis, if a defensive act is interpreted as an offensive one. Such situations come from a lack of understanding of the motivations on the other side and are brought about by the deep distrust between the superpowers. The differences in the political systems are a major obstacle to that understanding. The authoritarian regime, the ideology of world-communism, the lack of elementary human rights, the treatment of minorities in the Soviet Union and the suppression of freedom in WTO countries, arouse fears in the USA; the ideology of capitalistic free enterprise, virulent anti-communism, the human rights activities, the warm sympathy towards the victims of communist oppression, and lately, the talk about liberating the world of the evils of communism, arouse fears in the Soviet Union, and not only in leading circles.

What can be done to stop the arms race, to decrease the vast over-supply of nuclear weapons and to reduce the danger of a military conflict between the superpowers? Let us first put down five principles which must guide our thoughts:

1. There is no issue at stake which can ever justify resort to nuclear weapons.
2. Today and in the foreseeable future neither side can destroy the other without being destroyed.
3. Nuclear explosives are not weapons of war. Their only purpose is to deter the opponent from using them. The present level of deployment is many times higher than necessary for that purpose.
4. The arms race will continue at an increasing rate as long as each superpower is in mortal fear that the other side will use every opportunity to obstruct or destroy it, a fear that exists but is irrational in view of point 2.

5. In the present atmosphere of fear, distrust and confrontation, measures to halt the arms race and to reduce the level of nuclear arms have little chance of being accepted. Progress in arms control beyond the existing treaties is possible only if the superpowers recognize the common overriding interest in a reduction of nuclear weapons. It is then a chicken-and-egg question what comes first, a change of attitudes or a significant arms reduction.

It follows from these principles that the danger stems from the fear of the intentions of the other side. This is well illustrated by the following. There exists a nation whose social system and culture is different from ours. It is in possession of enough nuclear weapons to destroy most of the USA. It is France. Nobody in the USA would ever worry about it, however.

Our greatest problem, therefore, is the reduction of the mutual fear. In the past it was sometimes favourable for a power to make an opponent fearful in order to extract political concessions. Today, in the present superpower confrontation, inducing fear in the opponent is against one's own interest. All it does is to escalate the arms race and to increase the probability of dangerous irrational acts. The difference comes from the undeniable fact that, today, the weaker power can inflict unacceptable damage to the stronger one in case of war.

Fear is not an objective fact, like the number of warheads; it arises from the interpretations and misinterpretations of statements and actions of the other side. There is no point in claiming that all actions of the West have always been purely defensive and that the West will never start a war against the

Soviet Union under the present circumstances. From any rational point of view, neither side would ever start a war or initiate a destructive first strike. The former would inescapably lead to a nuclear exchange and holocaust, and the latter is technically inachievable for a variety of reasons, such as the submarines. But politics is not always rational.

There are ways to reduce mutual fear and distrust. An indispensable first step is an awareness of the problem. Every statement and every action of the governments should be examined with a view as to how it will be interpreted by the other side. Will it increase or reduce fear and distrust? An increase ought to be regarded as an important argument against the measure. There are a number of obvious examples. Certainly the deployment of SS-18 and MX missiles is perceived as a step towards first strike capabilities. The small military advantage of the deployment of Pershings in Europe must be compared with their fear-producing effect. The same holds for the other side in regard to the large deployment of SS-20 missiles against Europe, or the high fraction of land-based missiles which are perceived as a preparation of a first strike, despite the utter futility of such a strike, given the US submarines.

It will not be easy to reduce the level of fear and distrust but it is our only hope. The present attitudes of confrontation must be changed into one of common understanding. How can this be done? We list here a number of military and non-military measures. The military measures are of three different kinds: (a) independent (unilateral) actions; (b) declarations of policies; and (c) negotiations of treaties.

Here is the list:

### **Independent Actions:**

1. Reduce the missile forces by a certain amount and await the reaction of the other side.
2. Reduce or abolish "MIRVed" missiles and rely on single warheads.
3. Restructure the conventional forces of Western Europe such that they are effective as defence against intrusion.

### **Declare:**

1. "No-first-use" of nuclear weapons.
2. No intention to abolish or subvert allies or potential allies of the other superpower.

### **Negotiate:**

1. Nuclear arms reduction.
2. A comprehensive test ban.
3. Ban on ASAT and on weapons in space.
4. A nuclear-free zone in Europe.
5. The abolishment of tactical nuclear weapons.

A special responsibility falls on Europe in these matters. The two superpowers are locked in a struggle of military and political competition. Their efforts towards arms control, and cooperation are hampered by political considerations, by face-saving tendencies, by attempts to outsmart the other side and to put the blame on the opponent. But the future existence of Europe and the world, for that matter, should not depend on the whims of the superpowers, whether they decide to bargain or to fight, to give in or not on some secondary items, such as the numbers of certain missiles types that are not relevant when considered within the total range of the nuclear posture.

Europe is much less stuck in the ruts of previous policies or propa-

ganda. So far it has played the role of a bystander, leaving the initiatives to the superpowers. Why does Europe leave the proposals, the counting, the decisions to the USA and to the Soviet Union? True enough, groups of influential European personalities have brought forward proposals for treaties and measures for the reduction of tensions, such as the Palme Commission's proposal of a nuclear-free zone in Europe. But the governments have been rather passive in these matters. They could have their own observation satellites, their own evaluation centres, which are independent of those of the superpowers and therefore less subject to political bias. Unfortunately, the present mood in Europe is not conducive to taking an active role in world affairs. There was rarely a time when it would have been more important.

What about non-military measures? In order to reduce fear and distrust, and in order to achieve a better understanding between the superpowers, many more contacts and opportunities of collaboration must be established. Instead of curtailing relations as is done now, the opportunities for personal meetings should be increased and more commercial interdependence created. In times of political tension such contacts are even more important. Official and unofficial personal relations of politicians, professionals, business people, scientists and artists, are very helpful in order to find out what people think and feel on the other side and to avoid misunderstandings. Obviously it is not easy for Westerners to judge what really goes on in a totalitarian society; but some contacts are better than none. Increased numbers of Soviets visiting the West can only help to dispel some of the Eastern propaganda.

The neurophysiologist, John Eccles, introduced the acronym MESTA, meaning mutual economic scientific technological advantages. There are many topics of mutual interest where a collaborative effort would not only lead to a better understanding and to a reduction of fear and distrust, but also to new insights and results in the interest of humanity. Here are ten topics for cooperation between the USA and the Soviet Union which could be advantageous for both sides:

1. New energy sources.
2. Conservation of planetary resources.
3. Atmospheric problems, such as the increase of CO<sub>2</sub>, the dangers to the ozone layer and the dying of forests.
4. Pollution of the oceans.
5. Problems concerning our planet, earthquake warning, polar exploration, weather and crop predictions.
6. New sources and distribution of food, famine prevention.
7. Health problems, epidemics, birth control.
8. Uses of space for communication and industrial processes.
9. Collaboration in large scientific enterprises, such as particle accelerators and planetary exploration.
10. Third World support.

The list of proposals presented here for reducing the tensions between the superpowers is by no means complete. Certain items may be replaced by others, other items may turn out to be politically impracticable or counter-productive. But some measures must be taken in order to change the direction of events

towards a more stable situation. Too much is at stake in an actual nuclear conflict. There are many people who believe that an arms race is not such a bad thing, e.g., larger numbers of weapons on both sides have a stronger deterrent effect, therefore we become better protected against a nuclear holocaust. Our analysis showed, however, that the arms race is the product of mounting fears on both sides. The race itself increases the fears, so we engage in an ever-mounting and never-ending spiral that feeds on itself. Fear is our enemy, it leads to increased distrust, to misjudgments of the opponent's intentions, to more inhibitions against negotiations and to more irrational reactions. All this increases the danger of an outbreak of nuclear war in times of political crises.

Every effort must be spent to change the present confrontation and arms competition and arrive at a common understanding of the terrible danger faced by both superpowers alike and by the rest of humanity. It will be a long haul and it will require a great deal of political and military insight, an understanding of the psychology of the adversary, a readiness to compromise, and of wisdom, none of which are much visible in these times. It must be based on an absolute pragmatic, ethical and moral dedication to the aim that nuclear war should not, cannot and must not occur; a dedication which is not always evident in today's leaders.

Time is running out. The longer we wait the harder it will be to change the present collision course.



THIRD PAN-AFRICAN PUGWASH SYMPOSIUM ;

AFRICAN SECURITY

Cairo, 31 October - 3rd November 1984

List of Participants

Brig. E.M. Abdelatif, Sudan.	Capt. Z. Hwayi, Burundi.
Prof. A.M. Al-Mashat, Egypt.	Gen. M.N. Ibrahim, Egypt.
Dr. A.M. Aly, Egypt.	Brig. B.J. Kabogo, Tanzania.
Capt. Z. Cyrille, Burundi.	Brig. A.R. Kamazima, Tanzania.
Prof. U. D'Ambrosio, Brazil.	Dr. M.M. Kaplan, Switzerland.
Dr. O. R. Davidson, Sierra Leone.	Prof. V.B. Kokorev, USSR.
Prof. J. Diouf, Senegal	Prof. S.M. Labib, Egypt.
Prof. E. El Ayouty, USA.	C. Lerole, South Africa.
Amb. F. El Bidewi, Egypt.	Brig. M.B.R. Lupembe, Tanzania.
A.M. Elsayy, Egypt	Prof. S.N. MacFarlane, USA.
Prof. M.E. El Tom, Sudan.	P. Magapatona, Namibia.
N. Embumbulu, Namibia.	O. Magdi, Egypt.
Dr. Y.A. Eraj, Kenya.	Dr. L-J. M'Bedy, Cameroon.
Brig. N. Eskander, Egypt.	Prof. M. Mahfouz, Egypt.
Gen. E. Ezz, Egypt.	Prof. L.K. Meleika, Egypt.
M. Fayek, Egypt.	Amb. S. Mokhtar, UN.
Dr. E.E. Galal, Egypt.	Dr. A.S. Abdel Moniem, Sudan.
Prof. M. Ghallab, Egypt.	Dr. M. Mortada, Egypt.
Prof. L.K.H. Goma, Zambia.	Brig. R.P. Nboma, Tanzania.
Prof. A.E. Hillal, Egypt.	Dr. A. Rahmy, Egypt.
Prof. N.A. Hilmy, Egypt.	M. Rateb, Egypt.
Prof. Dorothy Hodgkin, UK.	Amb. A.R. Reidy, Egypt.
A. Howeid, Egypt.	Dr. M. Said, Egypt.

Dr. A. Santos, France.

Brig. A.A. Tong, Sudan.

Amb. A. Sidki, Egypt.

Dr. A.M. Vassilev, USSR.

Prof. A.R. Sidky, Egypt.

E. Wali, Senegal.

Amb. A. Sithole, Mozambique.

S. Yassin, Egypt.

A. Sowar, Egypt.

Prof. M. Zouhir, Tunisia.

---

## REPORT OF THE SYMPOSIUM

### Introduction

Fifty-six participants from 20 countries and the United Nations met in Cairo from 31 October to 3 November 1984 to discuss African Security. Participants included observers, and experts from major countries in the north. The following report is based on three working group reports and is issued by the Steering Committee of Pan-African Pugwash (PAP) on behalf of the Symposium.

#### 1. The Global Confrontation and African Security

We view with great concern the global crisis in the East-West confrontation, and its impact on African security. The problem is considered as grave and dangerous for mankind.

The subject was discussed in the following terms:

1. The nature of the global crisis, its dynamics and prospects.
2. Linkage between the global crisis and African security.
3. What is to be done?

The contemporary crisis in the international system was discussed, notably its reasons, dimensions, manifestations and prospects.

There is a growing mutual mistrust between the USSR and the USA. Their relations have moved from negotiations to confrontations. There is a dangerous acceleration in the nuclear arms race. The deployed new weapon systems are destabilizing as well as superfluous, have a high degree of precision, are difficult to monitor, and dangerously reduce the warning time. They are perceived by opponents as systems of unacceptable and provocative first-strike capability.

The accelerating nuclear arms race is contributing to strains of the world economy, diverting scarce vital resources, and feeding political destabilization particularly in the Third World.

A disturbing manifestation of the global crisis is the role of foreign powers in establishing military bases and facilities in Africa. This role affects and escalates regional conflicts and competitive arms

---

Ed. note: PAP is a regional group of the Pugwash Conferences on Science and World Affairs. Official declarations and statements representing Pugwash policy are issued only through the Pugwash Council and its Executive Committee.

transfers, monopolizes resources, and competes for strategic positions and bases. We see an urgent need to minimize the role of external intervention, and to disengage African security from the global crisis. Such disengagement needs to include the role of certain ex-colonial European countries.

The threat of aggressive racial states possessing nuclear-weapons capability, like South Africa, poses grave risks to African security.

South Africa is a prime example of a neo-colonial situation in the continent. As a symbol of racism and apartheid, South Africa represents a destabilizing factor in southern Africa and a threat to Pan-African security. All pressure must be brought on western powers, particularly the USA and well-known lesser states, to desist from helping South Africa. Also, the link between South Africa and Israel was strongly condemned, especially their cooperation in the nuclear field. These ties constitute a real threat to African security and peace.

We made a point of distinguishing between three types of conflict and sources of security threats:

- a. conflict within the boundaries of the states;
- b. inter-states disputes; and
- c. anti-colonial conflicts and national liberation struggles.

Foreign intervention is unjustified and unwarranted. It leads to more complications and problems and is a security threat to various African countries. In anti-colonial and national liberation struggles such as the case in South Africa, the occupation of Namibia, and the aggression of South Africa against Angola and Mozambique, the national liberation movements have the right and duty to use all means to achieve

their goals.

We emphasize the importance of enhancing African security and the need to establish and strengthen regional mechanisms for crisis prevention and management and conflict resolution. The need is underlined for a continental strategy to that end to disengage African security issues from global East-West tensions and actions.

The pre-requisite for crisis control at the regional level is a consensus on the desirability of limiting foreign engagement in African conflicts, i.e., a conscious return to the principles of nonalignment and self-reliance in the realm of security. It is very important that African states refuse to provide bases or military facilities to foreign powers.

There is a need for stronger institutions for crisis control at the African level.

We should work towards an Organization of African Unity (OAU) crisis control mechanism which is permanent, adequately financed, and independent of the changes of the Organization's chairmanship. Functions of such an African mechanism may include:

- a. gathering of data on regional conflicts and monitoring arms transfers and arms build-ups;
- b. verification of complaints by member states;
- c. regional pressure on states to refrain from force, and to delay the use of force while diplomatic and political efforts at conflict resolution proceed;
- d. provision of a permanent forum for negotiation and mediation in regional disputes;
- e. providing personnel for truce observation and verification

- of compliance with agreements;
- f. a more ambitious provision of peacekeeping forces;
  - g. containment of inter-state crises by pressures on other African and non-African actors through active diplomacy;
  - h. conflicts to be discussed first in the OAU before resorting to the United Nations;
  - i. foreign troops not to be called to intervene in African conflict as a matter of principle. If they are, it is to be done through the U.N. and from the non-permanent members of the Security Council. When foreign troops intervene, the legality of the situation would be decided by the OAU.

The existence of such a mechanism, representing a broad regional consensus, would itself constitute an effective deterrent to foreign involvement, as it would make credible the claim that the short term foreign quest for unilateral gains would involve longer term region-wide costs. This in turn would reinforce crisis prevention efforts at the global and big powers levels.

These arrangements must rest on viable economic, social and political systems. The domestic, social, economic and political sources of threats must not be minimized. In particular, issues of food and agriculture are of vital importance. African states have to work together to encourage efforts for regional economic integration and collective self-reliance. They have also to respect human rights and ethnic minority rights within their territories. The viability of the African domestic situation is an

important guarantee of their security.

#### The United Nations role

The security role of the United Nations and the world community must be emphasized, as well as its role in motivating the USSR and USA to realize the gravity of the international situation and to resume negotiations on arms control. In particular, the Non-Proliferation Treaty (NPT) approach must be activated to include positive guarantees for countries which signed it, and to impose sanctions on South Africa and Israel for their refusal to sign the Treaty.

#### The Superpowers

The possibility for superpower collaboration exists, because Africa should not be a strategic high priority area for both the USA and the USSR. The lack of conflicting immediate vital interests gives a certain amount of flexibility to their policies concerning Africa. A critical pre-requisite for success in efforts at crisis control at this level, however, is the abandonment of unilateralism. Most importantly, the USA must accept that the USSR has a role in regional affairs and act accordingly.

To that end PAP recommends:

- a. consultation and exchange of information on policies in the region in order to avoid misperception and miscalculation;
- b. the creation of a permanent mechanism to ensure that such consultation takes place in crisis situations;
- c. agreement on giving financial and diplomatic support to regional efforts at conflict resolution;
- d. agreement on limitation of big

powers' military involvements - no bases, no military intervention and no support for proxy intervention, except those legitimized by the OAU representing a clear African consensus;

- e. control of arms transfers to aggressors opposed by the OAU.

At the strategic level there is an urgent need for a commitment on the part of the superpowers to the following principles:

- a. not to use nuclear weapons first;
- b. not to use nuclear weapons against states which do not own them or keep them on their territories;
- c. not to extend the limits of the existing two military blocs to Africa;
- d. not to establish new military bases in Africa and to work for liquidating existing ones;
- e. to establish nuclear-free zones in Africa;
- f. not to expand the arms race to outer space;
- g. to start cutting military expenditure and use part of it for assistance to the development of Africa and Third World countries; and
- h. to freeze the present level of armaments, and to resume serious negotiations on arms control and disarmament.

PAP requests Pugwash to:

- 1. issue a declaration on African security which condemns the racist regime and expansionist policies of South Africa and request western powers, particularly the USA, to refrain from supporting that regime;
- 2. establish an African working group to explore in depth possibilities for crisis management and control in Africa.

- 3. sponsor informal discussions between Soviet and American experts to explore common grounds on African security and to ensure regular exchanges of information between the two.

PAP should disseminate its views on African security throughout Africa in order to raise awareness of the public about the issues and to mobilize actions of governments.

## II. The Regional Impediments to Security

Economic development and social harmony are the basic requirements for stability and security in Africa. Hunger resulting from natural conditions, lack of proper development and social inequalities was considered as the greatest threat to African security and stability. Not satisfying the basic human needs for the majority of the population is potentially a serious source of crises in the continent. Inadequate infrastructure and other poor support systems also contribute to the problems outlined above.

However, noting that the continent has abundant natural resources and sufficient manpower, adequate planning and management of these resources play a significant role in attaining the goals and aspirations of the continent for economic development.

The need for political will and commitment, and also the necessity for proper interaction between policy-makers and scientists and the population in general, were considered as key factors for development.

Africa has a very rich and diverse history and culture. It has also undergone a long history of colonization which increases the complexity of problems between its

nations.

### **Recommendations**

1. All efforts should be made to introduce new methods in order to improve productivity without disturbing traditional ways of life.
2. Political and economic discrimination among ethnic groups should be abolished.
3. Borders existing at independence should be respected to reduce conflicts between states, as provided for in the OAU charter.
4. Programmes should be initiated to promote inter-communal communication.

### A. Demographic Factors

The impact of population and growth distribution on development and security in the continent is important. It was noted that as economic development and education increase, population growth declines. The need for family planning to control overpopulation should be considered according to specific situations.

### **Recommendations**

1. Population growth and distribution are linked to economic development and education and needs further studies.
2. The relationship between population and resources is an important factor and should be taken into consideration in planning.
3. Unhindered movement of the labour force within Africa should be encouraged.

### B. Education

The eradication of illiteracy should be a major concern for African states in order to ensure higher standards of living, and also to secure a more qualified manpower.

### **Recommendations**

1. Training for development should not include reading and writing only, but also the transfer of technical skills and methods to improve productivity and quality of life.
2. Technical training should be linked to specific environmental problems.
3. In addition to formal education, adequate attention should be given to informal methods and networks through non-governmental associations, in-house education and media. Special attention should be given to adult education, especially for prospective mothers. Due respect should be given to traditional cultures.

### C. Political Stability

At present many African countries are faced with political disputes among and within states. The following are therefore recommended in order to achieve political stability:

1. Freedom is a fundamental and inalienable human right, which should be guaranteed.
2. The right to free expression is urgently needed in many African states.
3. Active participation by all citizens and groups is a crucial component of political stability and economic development.

4. Human rights should be sustained and respected.
5. The establishment of leadership in Africa on the basis of acceptance and legitimacy should be encouraged and enlarged.
6. The intellectuals of Africa should participate more and assume an effective role in the political and social life of their countries and the continent as a whole.
7. Raising the political awareness of the broad masses is an important condition for development and social involvement.

#### D. The Economic Field

The economy of the continent is at present in a very difficult situation. Considering the international scene the future would seem very bleak. The present state of indebtedness for most states is intolerable and ways should be sought to reduce this indebtedness without creating social unrest. With a view to restoring the economy, it is recommended that:

1. First priority should be given to food security. To this effect, measures should be taken to increase local production. This can be best accomplished through self-reliance and regional cooperation. In crisis situations every effort should be made to ensure the best use of surplus in developed countries.
2. Food security systems should be established to safeguard against food crises. Reserves should be formed with local production as well as the surplus of the developed countries.
3. More comprehensive plans should be adopted to explore practical

scientific solutions to the problem of changing climatic conditions (drought); international cooperation is needed to achieve this goal.

4. Assimilation, adaptation and the use of available technology should be encouraged, regardless of its degree of sophistication insofar as it responds to African needs and available resources of the country.
5. In addition to the effective use of indigenous technology, mechanisms should be instituted to assess, adapt and select exogenous technology to the continent. Existing cultural factors should be taken into consideration.
6. Improvement of infrastructure, transport and communication facilities is greatly needed to promote cooperation for development among African states.
7. Proper and accurate surveys of the natural resources should be conducted to help the development process in Africa.
8. Decisions concerning policies, priorities and strategies for economic development should be made by Africans without prejudice to the use of external technical assistance.
9. Practical steps should be taken to ensure effective and speedy implementation of the Lagos Plan of Action.

#### III. Southern Africa and Namibia

In the course of 1984, several developments have taken place which seriously affect international peace, security and development in southern Africa. It is clear beyond any reasonable doubt that apartheid

South Africa has embarked on an extremely dangerous offensive intended to establish a hegemonic system in that part of the world.

Agreements of the Nkomati-type are perceived differently by the various actors within this highly conflictual situation. Whereas racist South Africa regards them as a means of entrenching her obnoxious system of apartheid, which has been declared by the U.N. as a crime against humanity, the independent southern African states view them as affording the affected countries the opportunity to protect and consolidate their independence. Nevertheless, the liberation movements in southern Africa understandably view them with alarm as constituting a serious setback for the liberation struggle.

The environment which made these agreements possible was a complex one, created by a combination of post-colonial heritage of economic and social dislocations, natural disasters, security vulnerability, the disruptive activities of armed groups directed by South Africa, and inadequate material support from the rest of Africa and the world to the independent African states and the liberation movements.

The racist Pretoria regime was also enabled to succeed in this undertaking by its preponderant military and economic prowess, both of which were made possible by the unremitting support it received from its Western allies.

The apartheid regime was further assisted by the so-called "constructive engagement" policy of the USA, a policy which has enabled the hideous Pretoria regime to conduct itself with impunity.

International organizations, such as the U.N. and the O.A.U., have

been unable to give effect to their various resolutions relating to apartheid South Africa and which called for ostracizing that regime, imposition of mandatory arms embargo as well as other forms of sanctions aiming at the dismantling of the apartheid system, the securing of Namibia's independence, and the rejection of the so-called "new constitutional dispensation" which entrenches apartheid through a structured process of denationalization of the black majority.

Taking these important considerations into account, we conclude that:

1. Agreements concluded under conditions of duress are, under international law, considered as null and void. They should be regarded as having no effect on the continuation of the struggle against apartheid and for Namibia's independence by all available means, as a legally-sanctioned right under the provisions of the U.N. and O.A.U. Charters, as well as international law in general.
2. The severity of the present environment producing these agreements, which the apartheid regime manipulates as instruments of destabilization and hegemony in southern Africa, is understandable as it represents a temporary phase in both the history of the region and the course of the liberation struggle.
3. The linkage between the apartheid regime and its Western supporters continues to aggravate international peace and security in the region, to retard the eradication of apartheid, to impede Namibia's independence, and to increase civil strife in the region as a means of prosecuting Pretoria's destabilization policies.

4. The so-called "constructive engagement" policy of the USA is misguided as it represents acts of direct support to the Pretoria regime.
5. The inability of international organizations to act effectively on their resolutions relating to the problems of the region is not endemic, as it can be remedied through better performance on the part of the members of these organizations in the discharge of their obligations.

### Proposals

The following proposals aim at providing pragmatic approaches to a very complex situation. Therefore, these proposals are not intended to meet all the dangerous elements of the situation in southern Africa as listed above. They confine themselves to what is possible and practical in the circumstances.

1. There is an urgent need for closer consultations, as appropriate, among independent African countries, as well as between these countries and the liberation movements with regard to agreements which may adversely affect the liberation struggle or regional stability and development.
  2. The continuity and effectiveness of the liberation struggle in southern Africa call for maximization of political, diplomatic, moral and material support from inter-governmental and non-governmental organizations, other states and individuals to the frontline states and the liberation movements in southern Africa. This is an endeavour in which Africa and the O.A.U. should assume the primary responsibility, and which should enable the region to withstand the persistent hegemonic and destabilizing efforts exerted by the apartheid regime.
  3. It is clear that further efforts are called for to arouse the conscience of Western countries - governments, trans-national corporations and other business communities, labour unions, and the public at large - to the dangers inherent in the system of external support in whatever form it takes that is extended by those countries to the Pretoria regime.
  4. The USA policy of "constructive engagement" should be abandoned as it has encouraged the apartheid regime in its twin objectives of hegemony and destabilization in southern Africa. Instead, the USA should enter into a meaningful dialogue with the liberation movement in South Africa.
  5. Pugwash should marshal the scientific community to have governments throughout the world maximize all forms of support to the struggle for peace, justice, human dignity and human rights, Namibia's independence, and liberation and development in southern Africa.
-

## SECURITY AND PEACE-KEEPING IN AFRICA

Principal points of a paper presented by  
Dr. Boutros Ghali, Minister of State for Foreign Affairs, Cairo, Egypt

### Introduction

Security cannot be defined only as the freedom from external military threat and violence; it cannot be merely confined to the physical safety of a nation, its territory or its sovereignty. The concept of security has a much wider connotation of political economic and social stability. It is related as much to domestic stability as it is to external aggression.

For Africa, security is a basic requirement as the huge economic social and cultural problems that burden our continent cannot hope to find solutions if security and stability are not ensured.

Since the years of independence, Africa has in fact gone through an era of internal turmoil and destabilization, has seen numerous attempts to introduce the cold war into the continent, and until this very day, a number of African countries rely upon outside parties for their security as well as their economic and political stability.

### The Organization of African Unity and Collective Security in Africa

Nevertheless, the newly independent African States' main security concern was to preserve their newly acquired independence. When the founding fathers in their wisdom signed the Addis Ababa Charter in May 1963, they viewed the Organization of African Unity (OAU) more as a system against colonialism than as a peace keeping body responsible for settling inter-African disputes. Therefore, aggression was conceived mainly as coming from a colonial power and little attention was given

to the possibility of an African aggression against another African State. This fact must be borne in mind when examining the different African attempts to create a collective security system.

Decolonization as such is not only an end in itself, but also is one of the means to ensure the security of African nations and preserve them from attempts of foreign hegemony.

However, the fact that emphasis was put on foreign aggression and colonialism does not mean that Africa has neglected totally the possibility of settling inter-African disputes, and that the OAU has not given any attention to peace keeping among African States. Hence, the OAU has set a series of basic principles that should govern inter-African relations. They are mainly the following four principles:

1. The principle of peaceful settlement of inter-African disputes by negotiation, mediation, conciliation or arbitration. According to Article III para 4 of the Charter it is an implicit commitment not to use force or violence in inter-African disputes; it reflects the desire of African States to solve their disputes in an inter-African frame.
2. The principle of the intangibility of African frontiers; Article III para 3 reaffirms the adherence of all member States to the respect of that sovereignty and territorial integrity. Therefore, the African Heads of State in their wisdom decided to accept the **status quo** inherited from the colonial era, and agreed that no territorial claims would be

advanced to dispute these borders.

3. Condemnation and refusal of all forms of subversive activities. This principle stands in para 2 Article III as the principle of "non-interference in the internal affairs of States", and "condemns unreservedly all forms of political assassination as well as subversive activities".

But inspite of these declarations of principles, the Charter did not make any provision for African collective measures to oppose such subversion, and the OAU was not designed as a "holy alliance" that would stand against any revolutionary government or any change of regime.

4. The adherence of all OAU members to the principles of Non-Alignment. Para 7 of Article III constitutes an affirmation by the African States of the policy of Non-Alignment towards all blocs as a way to preserve Africa from the ill effects of the cold war.

The Council of Ministers of the OAU in its second session held in Lagos in February 1964 passed Resolution 12 which re-states the will of the African States to follow a non-aligned policy; requires the abrogation as soon as possible of any commitment by African States that would be in contradiction with this policy; and stipulates that African States should coordinate their foreign policies, in particular in the field of Non-Alignment.

#### OAU Organs in the field of security and peace keeping

1. The Commission of Mediation, Conciliation and Arbitration.
2. The Defence Commission.

3. The proposed African Security Council.

#### From Theory to Practice

Throughout these last two decades, a large number of inter-African conflicts have erupted, thus imposing the test of reality and practice to the texts and principles of the OAU. It would be interesting in the context of this essay to refer to a number of examples inasmuch as they relate to the OAU system and the capacity of this Organization to deal with security and peace keeping in Africa. We can mention the dispute between Algeria and Morocco, the dispute between Somalia and Ethiopia, the Western Sahara conflict and the Chadian problem.

#### Conclusion

Twenty-one years after the foundation of the OAU, it is obvious today that Africa has not been able to adopt a continental strategy for defence. A number of problems and difficulties have to be overcome before any strategy can be effective and operational. These problems and difficulties can be summarized in the following points:

1. The political realities in the continent today are quite different from the realities prevailing in 1963 when the OAU was founded, while the Addis Ababa Charter has not evolved accordingly. The question now is whether the Charter be amended and restructured to take into consideration new African realities? There are many difficulties which still obstruct the amendments of the Charter and the fear is often expressed that such amendments would open a Pandora box and start a flow of controversial proposed amendments.
2. Africa in the last few years has

been divided into distinctive groups, between a so-called progressive group and a so-called moderate one; between anti-Sahrawi Republic and pro-Sahrawi Republic; between pro-Hussein Habre and pro-Goukouni Oueddi. These serious divisions put Africa in a situation similar to the one prevailing before 1963 when the continent was divided between a Monrovia group, a Brazzaville group and a Casablanca group.

3. There is a lack of means in the financial, administrative, military and logistical fields to deal with situations arising from inter-African conflicts.
4. In the meantime, foreign ideological concepts and the presence of foreign military elements do not facilitate the elaboration of such a strategy.
5. The remaining forces of colonialism and racialism in Southern Africa follow a deliberate policy that aims to divide Africa.

But the existence of these difficulties and obstacles is not a good enough reason to give up and abandon our attempts to deal with security problems in a collective way.

A formula must be found to ensure that whenever the need arises, peace-keeping operations can be organized to play the role of a fire brigade. But if the financial and logistical requirements are lacking how can we hope to mount such operations? Different options arise in that connection:

1. Peace-keeping through cooperation between the United Kingdom and the Organization of African Unity;
2. Peace-keeping operations could also be conceived through cooperation between the OAU and a number of non-aligned countries;
3. Use of the successful precedent adopted for peace-keeping in Sinai, and rely on a multinational force formula.

I do not pretend to have the answers to all of these questions or to possess a formula that would solve our security problems. My contribution is to say loud and clear that unless we do find answers it will be extremely difficult in the next few years to ensure the security and stability of our continent.

In the last two decades, peace-keeping has evolved in a very drastic way and has taken new shapes, whether through the UN system or other **sui generis** arrangements.

If we do not heed the winds of change in an intricate and interdependent world, then these winds will blow away our security; and without security there can be no development, no progress, no stability and no better tomorrows for our children, our brothers and sisters.

Africa needs security and needs peace and stability. And that is why I appeal to all my brother Africans to set aside their quarrels and disputes and to concentrate all their efforts and all their energy to ensure peace, security and stability in our continent.

---

ABSTRACTS OF WORKING PAPERS

(Ed. note: Twenty working papers were prepared for the meeting. It is hoped that these will be published in a single volume as proceedings of the symposium. Three abstracts of papers are reproduced below.)

Superpower Intervention and Crisis Control in Africa

by S.N. MacFarlane

The paper assesses the regional impact of Soviet-American military competition in Africa, attempting to answer four questions:

1. how likely is superpower confrontation over African issues;
2. what are the regional implications of superpower military involvement in Africa;
3. what can African states do to limit the negative consequences of superpower involvement in regional conflicts;
4. what contribution can the superpowers jointly make to African security?

The paper argues that the probability of direct superpower confrontation over African issues is low, given the US and Soviet lack of critical interests and substantial commitments in Africa.

Superpower military involvement in African conflicts - be it in the form of limited intervention, support of intervention by other actors, arms transfers, and military assistance - may in specific instances contribute to regional security. In general, however, its consequences are negative. Soviet-American military competition in Africa provides local actors with

the means to engage in armed conflict, stimulates regional arms races, undermines regional norms governing the use of force, and complicates the resolution of regional conflict. In order to limit these negative consequences, the paper proposed a two-tier approach to the management of regional crises. This involves in the first place agreement between the USA and the USSR on exchange of information concerning their African policies, and institutionalized mechanisms for consultation in crises. Beyond this, the two could undertake to support regional attempts at conflict limitation and resolution, and to limit jointly in both qualitative and quantitative terms their military roles on the continent. More importantly, if African conflicts are going to be de-linked from the global competition, there is a need for the creation of a permanent regional mechanism for crisis control. A critical precondition for effective regional cooperation in the management and resolution of conflict is the emergence of a regional consensus that regional issues **should** be de-linked from global ones, and that African solutions can and should be sought for African problems.

---

Development, Peace and Progress through Cooperation

by A.R. Sidky

The author states his belief that "hunger is the most devastating bomb

in existence and the greatest threat to peace". Thus, proper development

is the right safeguard for developing as well as developed countries; both should work together to abolish poverty and hunger for their own very existence. He then discusses the tragic problem in Africa, indicating the way to meet the challenge. There should be an advanced agriculture with industry as a twin. Cooperation among African countries should be established to ensure collective successful self-reliance. Resources should be surveyed, plans prepared, priorities established, and work started together ensuring the best for all by all. Decisions and policy must be fully African, formulated by the group countries rather than imported. That does not mean not accepting or seeking all the advice, and technical and

financial assistance needed, with the full utilization of collective human, material and technical resources. The suitable traditional experience should be well studied, brought up to date and used. The best advanced technology should be studied, adapted and adopted. For south of the Sahara the author emphatically stresses the urgent need to formulate an internationally worked plan for building food reserves, both by the cooperating countries and by donors from the developed world.

The author makes a strong appeal for immediate intensified action, as it is a question of to be or not to be.

---

### Racism and Apartheid

by Y.A. Eraj

There can be no security in Africa as long as racism and apartheid are being practised by the white minority in South Africa. The motive for the continuation of apartheid is the profit that not only the South African white minority makes out of racial practises, but also the continuous support given by the Americans and the trans-national corporations for the same objective. The cheap and regimented labour supplied by the blacks in South Africa for the whites forms a very lucrative business set-up for the white races in the world.

No appeal to the conscience of the European races has been of any benefit as long as they are making a profit and can maintain their own indulgent and extravagant life styles, and it is becoming apparent that the non-whites have no chance of making the Pretoria regime change their attitudes. Not only the exploitation of black labour in South

Africa, but also the continuation of the obsolescence factor in machinery made in the industrialized nations, with blatant disregard to the pollution of the biosphere and the wastage of natural resources of the earth, are evidence of the selfishness of the North.

How much exploitation of the helplessness and backwardness of the developing nations on the part of the industrialized nations can be permitted by scientists is an ethical question which the scientists themselves have seriously to ponder over, and to evolve some leverage to dictate to the industrialized nations the extent of the profit they should be permitted to make on the exorbitant prices of technology that they extract from the Third World. They actually hinder the progress and development of the poor masses of the world.

At the moment, the un-checked pro-

fiteering to maintain the high standard of living of the European races is the biggest single factor which is keeping the Third World backward and underdeveloped to the point of starvation and disease. This has become a part of the

vicious circle which is being perpetuated. Science and technology are too expensive for the poor nations to buy, and the result is the existing hunger, starvation, disease and death in the underdeveloped countries.

---

### ELECTION OF PAP STEERING COMMITTEE AND CONVENER

The General Assembly of PAP met in the Pugwash office in Cairo on 1 November 1984 and discussed the following:

1. Evaluation and reassessment of the past three year period.
2. Election of the Steering Committee and Convener.
3. The future programme of PAP, and its further development.

The following elections took place:

1. Convener of the PAP Group: Dr. E.E. Galal was elected for a further period according to the constitution.

2. Members of the Steering Committee:

Prof. L.K.H. Goma (Zambia)  
Prof. J. Kamsu Kom (Cameroon)  
Dr. R. Andriambololona (Madagascar)  
Prof. S.E. Okoye (Nigeria)  
Dr. E.E. Ezz (Egypt)  
Dr. Y.A. Eray (Kenya)  
Dr. A. Abdel Moneim (Sudan)  
Prof. Jacques Diouf (Senegal)

Associate Members:

Dr. O.R. Davidson (Sierra Leone)  
Dr. Mohaffar Zouhir (Tunisia)  
Dr. L.J. Bonny Duala-M'Bedy (Cameroon).

Secretary to the Committee:

Prof. Salwa Labib (Egypt) was

elected to the new office of Secretary to the Committee.

3. Future Programme

a. A Conference to be held in Sudan in three years' time. Drs. Galal and Abdul Moneim will plan this conference.

b. A project on crisis prevention and control in Africa, to be co-ordinated with similar Pugwash efforts regarding the East and West and Latin America. Drs. Galal and Kaplan will negotiate the planning and coordination.

c. Re-issue of a Pan-African Pugwash Newsletter.

d. The meeting decided to send thanks and appreciation to President Mubarak for his support, and to the Egyptian Government, particularly Prime Minister Kamal Hassan Ali and Minister of State for Foreign Affairs, Dr. Botros Ghali. It was agreed to consider President Mubarak's message to the Symposium as a basic document for the working groups.

e. The Committee wishes to convey its thanks to the Namibia Council of the UN for its support and assistance, and for nominating M.S. Moukhtar as its representative.

E.E. Galal  
PAP Convener

STUDENT/YOUNG PUGWASH - 1985

Student/Young Pugwash has registered considerable progress with new plans and steps to organize major activities on the part of established groups and to ensure the steady growth of smaller national groups, and with the setting up of new ones.

The two major groups, USA and Canadian Student Pugwash (CSP) (both formed in 1979), plan to hold their (4th and 3rd respectively) annual conferences in June 1985. The former will be on the topic : "Science, Technology and Individual Responsibility", which will take place at Princeton University from 23-29 June. It is expected to be attended by around 90 students of different disciplines and nationalities, and a group of about 30 academicians, industrial experts and government officials.

The CSP national (annual) conference (to take place in Ottawa, between 14-16 June) will be held in the spirit of the UN declared "International Youth Year" designated for 1985, and will have as its theme : "Science, Education and Social Change". In addition, one evening session will be devoted to a discussion of : "International Peace and Security : the Role of the 'Middle Powers'" and is expected to include student speakers from Bulgaria, Canada, FRG, Netherlands, Hungary and Romania.

The Bulgarian Young Pugwash Group (formed in 1982), which concentrates its activities mainly among young scientists, benefits from the close support provided by their senior national Pugwash Group. Their next major activity will be in May (23-26) when they are planning to hold a national symposium on the subject : "Young Scientists and Peace : A Multidisciplinary

Approach", which will take place in Koprivshtitsa and will also be attended by participants from other national Student Pugwash groups.

Among the existing groups, the Finnish Student Pugwash, composed mainly of a small group of science students centred at the University of Helsinki, has been making steady and encouraging progress; they meet regularly with members of their senior Pugwash group at discussions and lectures comprising experts from various fields.

A new addition to the list is the West German Student Pugwash Group which was created in February 1984, following the active encouragement and assistance of the national West German Pugwash Group. Based at Ruhr University, Bochum, the West German Group has undertaken to organize working groups and lectures, and to disseminate information on Pugwash and its goals at various university centres across the country where student members are found. They are also thinking of participating jointly in the symposium planned by the national West German Group in November 1985.

The newest addition to existing national student Pugwash groups is that of the British, which formally came into being in October 1984 at the Students Union of the University of Manchester Institute of Science and Technology (UMIST), a key centre in Britain for training scientists, technologists and engineers. They work in close collaboration with both the University and the senior national Pugwash Group, both of which played a vital role in the setting up of this Group. A national conference is tentatively planned for the spring of 1985 as a step toward sustaining and expanding the existing healthy interest in

Pugwash, evidenced by the already large membership in the Group. Another branch of the British Student Pugwash was set up at the University of Oxford; liaison between the two groups has been established.

Plans for a Dutch Student Pugwash have been under way for some time, and new initiatives are being sought to overcome overriding obstacles, such as lack of funds, so that the necessary impetus for its creation may be generated.

Not all student Pugwash members have set up their own individual

national groups. Some, such as the Swedes, have considered it more expedient and worthwhile to work within the ranks of the existing senior national Pugwash Group in Sweden, an arrangement that has been welcomed by the latter. Young Greeks and French interested in Pugwash have also voiced similar suggestions, arguing that a single national Pugwash group, which also integrated younger members, might be more effective. There is some possibility that the Danes may also consider establishing a working relationship with younger members along similar lines.

Peri Pamir

---

#### BOOK REVIEW

NO FIRE, NO THUNDER - The Threat of Chemical and Biological Weapons, by Sean Murphy, Alastair Hay and Steven Rose. Pluto Press, London, 1984, pp.145, price UK£3.95.

This is a concise compendium of information on chemical and biological weapons. The book is soberly and factually written and contains much interesting information not readily available elsewhere. For example, it is postulated that Reinhard Heydrich's death in Prague by assassination by a Czech resistance group in 1942 was actually due to botulism, since apparently botulinus toxin had been incorporated into the shell used in the attack. The unproven accusations of highly doubtful validity against the United States of using biological warfare during the Korean War are unfortunately given more credence than they deserve. The sad history is reviewed

of allegations by the United States that the so-called "yellow rain" constitutes a chemical weapon supplied by the Soviets to Vietnam, whereas in fact, as shown by Professor Matthew Meselson of Harvard University, "yellow rain" is a natural phenomenon, namely the excrement of local honey-bees. There are minor technical inaccuracies, such as mentioning brucellosis "spores" (brucellae are not spore-formers). The authors raise alarming possibilities for the use of DNA recombinants as biological weapons, but fail to balance this with counter-arguments of which the authors should be aware (e.g., Bulletin of the Atomic Scientists, November 1983, p.27). These are minor drawbacks in an otherwise valuable book. I recommend it to anyone interested in chemical and biological weapons.

M.M.K.

---

NOTICES ON OTHER PUBLICATIONS

THE ARMS RACE AT A TIME OF DECISION: ANNALS OF PUGWASH 1983, edited by Joseph Rotblat and Alessandro Pascolini with a foreword by Dorothy Hodgkin, Macmillan, London, 291p., 1984, paperback U.K.£7.95. Note: Copies at a special price of £5 (U.S.\$6) including postage, are available to readers of the Newsletter through the Pugwash London Office.

and will also be published by Macmillan. The publication date is spring 1985.

HERBICIDES IN WAR: the Long-Term Ecological and Human Consequences, edited by Arthur H. Westing, a SIPRI publication, Taylor & Francis, London, 1984, 210p., hardback £15.

THE ANNALS OF PUGWASH 1984 under the title "NUCLEAR STRATEGY AND WORLD SECURITY" has gone to press

THE CHOICE: Nuclear Weapons Versus Security, by Gwyn Prins, Chatto & Windus, The Hogarth Press, London, 1984, £12.95 hardback, £6.95 paperback.

---

25TH ANNIVERSARY OF VDW

The Vereinigung Deutscher Wissenschaftler (VDW) celebrated its 25th anniversary in Bonn, FRG from 19-21 October 1984. The VDW, composed of over 350 leading natural and social scientists, serves as the national FRG Pugwash Group. The theme of the meeting, "Chancen des Friedens" was

covered in lectures given by Knut Ipsen, Wolf Graf von Baudissin, Dieter Senghaas, Karl Birnbaum, H.P. Dürr and C.F. von Weizsäcker. The Secretary-General of Pugwash conveyed greetings on behalf of the Pugwash Council. A publication is planned of the proceedings.

---

CENTRAL OFFICE IN LONDON

The Central Office in London has temporarily moved to an adjacent building. The address is Flat A,

Museum Mansions, 63A, Great Russell Street, London WC1B 3BG. The telephone number is unchanged.

---

OBITUARIES

INDIRA GANDHI

In answer to a cable of condolence sent on behalf of the Pugwash Council, the following letter dated 21 November 1984 was received from Prof. M.G.K. Menon:

"Thank you very much for the cable conveying your shock and sadness over the tragic death of Prime Minister Mrs. Indira Gandhi. We are deeply grateful to you and to your colleagues in the Pugwash Council for the message of deepest sympathy. I was in London when the assassination took place and rushed straight back.

Mrs. Gandhi was a true believer in secularism as Mahatma Gandhi was; and she died a martyr to the cause of secularism. She worked intensely for peace in the world. In her death the world has lost an outstanding leader, and particularly the developing world and the non-aligned countries. For India the loss is a monumental one; and Indian science in particular will miss one who was for it like a mother. No one could have given greater support and

encouragement to science than she did, as before her, her father Jawaharlal Nehru."

Mrs. Gandhi was a strong supporter of Pugwash. She attended the 12th Pugwash Conference in Udaipur (1964) and the 25th Conference in Madras (1974).

PROFESSOR FRANK TORTO of Ghana died in April 1984. He was Professor of Chemistry at the University of Ghana in Legon. He was one of the earliest Pugwash supporters in Africa and served on the Continuing Committee (now named Council) from 1971 to 1976. Between 1966 and 1977 he attended nine Pugwash Conferences and six Symposia.

SIR JOHN CRAWFORD of Australia died in November 1984 at the age of 74. He was Director of the Research School of Pacific Studies at the Australian National University in Canberra and later Chancellor of that University. He attended the 7th Pugwash Conference in Vermont.

---

INTERNATIONAL YEAR OF PEACE 1986

1986 has been designated by the United Nations as an International Year of Peace. A number of meetings and seminars at different levels and in different countries are being organized. A regional Seminar for Latin-America will be held in New York from the 25th to 28th February 1985. An international Conference on

Conflict Resolution and Peace Studies will be held in Suva, Fiji from the 30th December 1985 to 5th January 1986 (information from University of the South Pacific, Box 1168, Suva, Fiji). Details about other meetings will be given in later issues.

---

CALENDAR FOR FUTURE PUGWASH MEETINGS

1985

- |                            |  |
|----------------------------|--|
| 14 - 17 March              | Second Workshop on Conventional Forces in Europe, Pöcking (Munich), FRG.   |
| 7 - 9 April<br>(tentative) | Workshop on Crisis Prevention and Control in Africa, Lusaka, Zambia.   |
| 25 - 26 May                | 12th Workshop on Nuclear Forces, Geneva, Switzerland.  |
| July (tentative)           | Latin American Regional Symposium on Latin American Security, University of Campinas, Sao Paulo, Brazil.                                     |
| 9 - 14 July                | 35th Pugwash Conference, University of Campinas, Sao Paulo, Brazil.  |
| 24 - 27 September          | 46th Pugwash Symposium: "Political Conditions for Peace and Security in Europe: Obstacles and Perspectives", Bochum, FRG.                    |
| 24 - 27 October            | Pugwash/SIPRI 11th Workshop on Chemical Weapons: Implications for the Chemical Industry of a Chemical Weapons Convention, Stockholm, Sweden. |
| November (tentative)       | Symposium on Arms in Space, London, UK.  |
| December (tentative)       | 13th Workshop on Nuclear Forces, Geneva, Switzerland.  |

1986

- |                              |   |
|------------------------------|---|
| First quarter<br>(tentative) | Symposium on "Deterrence", Austria          |
| September                    | 36th Pugwash Conference, Budapest, Hungary. |



PUGWASH CONFERENCES ON SCIENCE AND WORLD AFFAIRS

President : Professor Dorothy Hodgkin  
Secretary-General : Dr. M. M. Kaplan

PUGWASH COUNCIL

Chairman: Professor M. Nalecz (Poland)

Members : Academician A. Balevski (Bulgaria)  
Mr. E. Bauer (France)  
Professor F. Calogero (Italy)  
Professor B.T. Feld (USA)  
Mr. S. Freier (Israel)  
Professor Jacques Freymond (Switzerland)  
Dr. E.E. Galal (Egypt)  
Professor H. Glubrecht (FRG)  
Professor L.K.H. Goma (Zambia)  
Professor J.P. Holdren (USA)  
Professor E. Leibnitz (GDR)  
Professor Patricia Lindop (UK)  
Academician M.A. Markov (USSR)  
Professor M.G.K. Menon (India)  
Professor J.K. Miettinen (Finland)  
Academician O. Reutov (USSR)  
Dr. M. Roche (Venezuela)  
Professor J. Rotblat (UK)  
Professor J. Ruina (USA)  
Dr. H. Scoville, Jr. (USA)  
Professor T. Toyoda (Japan)  
Professor V.G. Trukhanovsky (USSR)  
Dr. M.S. Wionczek (Mexico)

PUGWASH EXECUTIVE COMMITTEE

Chairman : Professor B.T. Feld  
Members : Professor F. Calogero  
Dr. E.E. Galal  
Professor Dorothy Hodgkin  
Professor J.P. Holdren  
Dr. M.M. Kaplan  
Academician M.A. Markov  
Professor M. Nalecz  
Professor J. Rotblat  
Dr. M.S. Wionczek

CENTRAL OFFICE (Temporary Address)

Flat A, Museum Mansions  
63A Great Russell Street  
London, WC1B 3BG.  
Telephone: (01) 405 6661  
Telegraph: PUGWASH LONDON

EXECUTIVE OFFICE

11A Avenue de la Paix  
1202 Geneva, Switzerland  
Telephone: (022) 33 11 80  
Telegraph: PUGWASH GENEVA  
Telex: PEACE 28 167 CH