Jules - Defense Budget + Arms Control

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NEW PERSPECTIVES ON AMERICAN SECURITY

Remarks by the Honorable George McGovern of South Dakota in the United States Senate, Friday, August 2, 1963.

Mr. President, eighteen years ago as the pilot of an American B-24 bomber I completed the last of 35 missions in the European theatre of World War II. A few days after the completion of that tour of duty the war in Europe ended.

Our crew climbed into a battle scarred bomber to return to the United States with the grim knowledge that we had used the most devastating weapons in the long history of warfare. Our four-engine bomber had day after day dumped 5 tons of TNT on its targets below.

But we had scarcely reached home before news stories told of a fantastic new bomb that had incinerated 100,000 Japanese men, women and children in a single searing flash. Suddenly, our 5-ton monster lost its significance in the shadow of that 20,000 ton destroyer of Hiroshima.

Although the new dimensions of death were beyond comprehension, book titles in the afterglow of Hiroshima -- One World or None, Modern Man Is Obsolete, Five Minutes to Midnight -- attempted to assess the meaning of the nuclear age.

Recognizing that humanity stood in deadly peril, we drew comfort only in the conviction that the new techniques of destruction were so terrifying that man surely would never use them -- would he?

Five years later, the A-bomb of Hiroshima passed into obsole-

science, not because it was too fearful to use, but because it had been replaced by the H-bomb -- a thousand times more powerful.

Meanwhile, the Soviet Union became a nuclear power, and in 1957 Sputnik I ushered in the space age. Today, the two super-powers, America and Russia, have piled up nuclear weapons with an explosive power of 60 billion tons of TNT -- enough to put a 10-ton bomb at the head of every human being on the planet.

A single warhead from the American or Russian stockpile if exploded over a great city would instantly transform it into a raging fireball 3 miles in diameter with a direct heat and blast capable of burning human flesh and collapsing buildings 25 miles from its center. Above a smoking crater a mile wide and several blocks deep, a gigantic, poisonous radioactive cloud would rise 20 or 25 miles to rain down torturous death on millions of human beings not fortunate enough to be incinerated quickly in the initial firestorm.

In spite of this grim prospect, the accumulation of more and more devastating weapons continues. The great powers are spending over $100 billion yearly on arms -- each side justifying its investment in the name of "defense". Yet, modern science supports the ancient biblical wisdom, "there is no place to hide".

Speaking to the United Nations assembly in 1961, President Kennedy said: "Today, every inhabitant of this planet must contemplate the day when it may no longer be habitable. Every man, woman, and child lives under a nuclear sword of Damocles, hanging by the slenderest of

threads, capable of being cut at any moment by accident, miscalculation, or madness. The weapons of war must be abolished before they abolish us...The risks inherent in disarmament pale in comparison to the risks inherent in an unlimited arms race."

We accept the logic of Mr. Kennedy's words, just as we accepted the earlier warning of former President Eisenhower: "There is no longer any alternative to peace." Why, then, does the arms race with its mounting military budgets continue?

Doubtless, a major factor is the uncertain quest for security through superior military strength. The Congress and the nation have willingly responded to the architects of our military security and have granted them unprecederted sums to insure the defense of our shores. Americans have felt that the growing technical complexity of the military art has required leaving the main judgments about security to our military officers.

As a freshman Congressman in 1957, I was tempted to raise some questions about what seemed to me to be a staggering military appropriations bill. But I lapsed into silence when one of the most respected Congressmen took the floor to say: "If our military leaders are wrong and we listen to their advice, it will cost us some money. But if these experts are right, and we do not heed their requests, it may cost us our country."

Given that grim choice, it is a reckless man indeed who would challenge the demand for more military spending. Every patriotic cit-

izen desires that his country be prepared to defend itself against attack. Even the most ardent economizers -- men who vote with zeal to cut funds for education, conservation and health -- are quick to shout "Aye" for more billions for arms.

I share the conviction that America ought to have a defense force which is second to none.

But, Mr. President, has the time not come to question the assumption that we are adding to defense and security by adding more and more to the nuclear stockpile? I suggest that we need to examine carefully the assumptions on which our military budget rests. We need a thoroughly honest discussion and debate, not so much about competing weapons systems, but rather about the basic postulates of our defense strategy.

Have we remembered that the defense of a great nation depends not only upon the quality of its arms, but also on the quality of its economic, political, and moral fabric?

Have we considered the impact upon these other sources of strength of our vast military investment?

Is there a point of diminishing returns in the race for security through arms?

Have we made the wisest possible allocation of our material and human resources to insure maximum security?

Are we building national strength by creating a higher pile of nuclear bombs and adding to our "overkill" capacity while failing to

match our millions of idle, untrained youth with the nation's needs for constructive economic growth?

Is our national security jeopardized by an outflow of gold that weakens the international value of the dollar?

Is the size of our military budget the chief criterion of effective international leadership and national strength in today's world?

What is the mounting arms race doing to our freedom and the quality of our lives?

And most important of all, are we following a blueprint for peace or racing toward annihilation?

For this fiscal year, we are asked to approve a Department of Defense budget of $53.6 billion, plus additional billions for the Atomic Energy Commission and the space program. That is well over half of our entire Federal budget. It represents more than the combined cost of all the social and economic programs of the New Deal period from 1933 through 1940.

Soon, we will be called upon to vote on the appropriation of funds for this enormous arms budget. This is a tremendously important vote for all of us, not only because it represents a great deal of money, but because it can give us an opportunity to examine some of the basic assumptions that now guide our national life. A federal budget is, after all, a careful listing of the public priorities and goals of the nation. When we devote more than half of that entire budget to one purpose, we certainly need to be reasonably sure of our ground.

My limited effort to prepare myself for this forthcoming vote as a Senator whose chief concern is the security of our country and the peace of the world has led me to certain tentatitive conclusions. I set them forth now, not as final judgments, but simply as one man's convictions about a most complex problem. It is my hope that these suggestions may stimulate in some way the larger debate which needs to be waged by those Senators and Congressmen with greater experience and knowledge than mine. Perhaps the insights of others may lead me to abandon or modify some of my present judgments.

In that spirit, I suggest the following propositions:

(1) The United States now has a stockpile of nuclear weapons in excess of any conceivable need.

(2) Bringing the arms race under control involves risks less dangerous than the proliferation of nuclear warheads and the acceleration of the arms race.

(3) Present levels of military spending and military foreign aid are distorting our economy, wasting our human resources, and restricting our leadership in the world.

(4) Diverting some of our present and proposed military spending to constructive investments both at home and abroad will produce a stronger and more effective America, improve the quality of our lives, and strengthen the foundations of peace.

CURRENT DEFENSE ASSUMPTIONS

To place these convictions in better perspective, I would like to sketch some of the considerations which seem pertinent to our defense policy decisions.

Those who advocate surrender or passive submission to the forces of international Communism will find little or no support in the United States. Most of us are willing to risk death rather than give the world over to a tyranny that is alien to all that we hold of value.

Likewise, few, if any, Americans would support the concept of an all-out military onslaught initiated by ourselves to wipe out the inhabitants of the Communist world. This, in another equally fundamental sense, would be a surrender of our values and traditions.

As a nation we have rejected both the concept of aggressive war and passive surrender. We have operated from the premise that the Communist threat is checked only because of our awesome military machine. This is the theory of "deterrence" which has guided our thinking for most of the period since World War II. When one looks for a more specific answer as to how that policy would be applied in the form of military strategy, he encounters some rather confusing and conflicting assumptions.

It has generally been believed that the deterrent or retaliatory power of America's strategic air power was targeted on the great cities of Russia to be used in the event of a major Soviet attack.

On June 16, 1962, however, Defense Secretary McNamara, one of the ablest and most courageous men to come into government in modern times, made an important speech at Ann Arbor, Michigan. In this address Mr. McNamara spelled out the "controlled counter-force" or "no-cities" doctrine. The Ann Arbor speech set forth the theory that instead of seeking first the mass destruction of the Russian populace, we would aim our missiles and bombers at Soviet nuclear weapons in an effort to cripple their capacity to hit the United States. Only if the Soviets attacked our cities would we strike at theirs.

This speech touched off a wide-ranging controversy, partly because its success would seem to depend upon the United States launching a first strike against the Soviet Union.

If the United States were aiming at the effective destruction of Russia's nuclear forces, how could we apply such a strategy unless we knocked out the Soviet missiles before they were launched from their silos? What military objective could we achieve by knocking out empty missile launchers after their rockets had hit American targets?

Secretary McNamara flatly denied that the United States has any intention of launching a first strike, but the "no cities" or "controlled counter-force" theory seems a most unlikely and impractical strategy.

In lengthy testimony before the House Armed Services Committee early this year, Mr. McNamara said:

"What we are proposing is a capability to strike back after ab-

sorbing a first blow. This means we have to build and maintain a second strike force. Such a force should have sufficient flexibility to permit a choice of strategies, particularly an ability to: (1) strike back decisively at the entire Soviet target system simultaneously; or (2) strike back first at the Soviet bomber bases, missile sites, and other military installations associated with their long-range nuclear forces to reduce the power of any follow-on attack -- and then, if necessary, strike back at the Soviet urban and industrial complex in a controlled and deliberate way."

The Secretary's own testimony, then, seems to make the above strategy highly unlikely. Mr. McNamara pointed out that the Soviets have always insisted that their nuclear power is aimed at the great urban, industrial, and government centers of America. He then stressed the virtual impossibility of either side destroying the other's hardened ICBM weapons or Polaris-type submarine missiles. And then the Secretary added a third point which would seem to remove any real feasibility of concentrating our nuclear power on Soviet missile sites rather than cities. In his words: "Furthermore, in a second strike situation we would be attacking, for the most part, empty sites from which the missiles had already been fired."

It might be reassuring to draw the conclusion from the "no cities" strategy that it is possible to fight a nuclear war centered on destroying missiles rather than people -- if only we could build enough missiles to destroy the enemy's nuclear capacity. But anyone who

is laboring under the impression that our Defense Department believes this to be feasible should read the Congressional testimony of Secretary McNamara of last February. The following brief excerpts from that important 163-page statement should be pondered carefully, especially by the members of Congress who are responsible with the President for the defense policies of our nation.

Said Secretary McNamara:

"Even if we were to double and triple our forces we would not be able to destroy quickly all or almost all of the hardened (Russian) ICBM sites. And even if we could do that, we know no way to destroy the enemy's missile launching submarines at the same time. We do not anticipate that either the United States or the Soviet Union will acquire that capability in the foreseeable future...We could not preclude casualties counted in the tens of millions.

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"The expanding arsenals of nuclear weapons on both sides of the Iron Curtain have created an extremely dangerous situation not only for their possessors but also for the world. As the arms race continues and the weapons multiply and become more swift and deadly, the possibility of a global catastrophe, either by miscalculation or design, becomes more real.

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"More armaments, whether offensive or defensive, can not solve this dilemma. We are approaching an era when it will become increasingly improbable that either side could destroy a sufficiently large portion of the other's strategic nuclear force, either by surprise or otherwise, to preclude a devastating blow. This may result in mutual deterrence but it is still a grim prospect. It underscores the need for a renewed effort to find some way, if not to eliminate these deadly weapons completely, then at least to slow down or halt their further accumulation, and to create institutional arrangements which would reduce the need for either side to resort to their immediate use in moments of acute international tension."

REALITIES OF SOVIET-AMERICAN OVERKILL

I think it is imperative that every American fully understand what our Secretary of Defense has told us. If nuclear war comes -- no matter who strikes first -- both sides will count their losses in tens of millions of human lives. There is no such condition as true nuclear "superiority" in the sense that either the United States or Russia could escape mass destruction should it attack the other. Hardened ICBM sites and nuclear-armed submarines have made the so-called "counter-force" and "no cities" doctrines obsolete before they were fully expressed.

Even before Mr. McNamara spelled out the Ann Arbor doctrine of

a nuclear strike confined to military installations, the distinguished chairman of the Senate Armed Services Committee warned that this notion was an empty hope. Said Senator Russell on April 11, 1962:

> "There have been some estimates and some so-called mathematical computations of the casualities that would result from a nuclear war under various assumptions, including a positive attempt by the adversaries to limit targeting to military installations and facilities. I have no hesitancy in saying, however, that to me these extrapolations, or projections, or hypotheses are exceedingly unrealistic."

The highly respected Senator from Georgia concluded:

> "In my opinion, if nuclear war begins, it will be a war of extermination."

The unprecedented condition of today's strategic military power is this: neither the US nor the USSR can prevent the other from wielding a society-destroying blow, regardless of who attacks first. Offensive military power has been made so varied and strong that all conceivable defensive systems can be overwhelmed or bypassed by the power of nuclear weapons.

Under these conditions, the classic military task of defending the shores of our country can no longer be performed. The present array of military doctrines gives a design for emerging from a nuclear exchange with more missiles than the opponent. But this sort of win would

be paralleled by the loss of our society.

The Russians do not have a nuclear capacity equal to ours, but our "superiority" is a largely meaningless concept in view of their "relative parity". In the days when warfare was limited to rifles and cannons and tanks and planes, the side with the most weapons and soldiers had a great military advantage. But in the space age, when a nuclear exchange of few minutes' duration means instant death and indescribable devastation to both sides, what consolation is there to the dazed survivors to know that there remains under the poisoned skies amidst the rubble some unused "overkill" capacity?

When asked at the Congressional hearings what the military situation would be after a nuclear exchange between Russia and the United States, Secretary McNamara replied:

> "This is a question we have considered. And I can't answer it...I think probably... the fatalities in Western Europe would approach 90 million, the fatalities in the United States would approach 100 million, and the fatalities in the Soviet Union would approach 100 million.
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> Now when you consider on the order of 300 million people dead in those areas, it is very difficult to conceive of what kind of military weapons...would continue to exist. We have nonetheless faced that issue, and we have systems provided that we believe would survive...
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> But it exceeds the extent of my imagination to con-

ceive of how those forces might be used and of what benefit they would be to our nation at that point."

It might be argued by some that our excessive nuclear spending serves an indirect purpose in that it forces the Soviets to strain their less affluent economy to match our effort. But the Russians seem to be avoiding construction of highly sophisticated weapons beyond what they regard as enough to destroy the United States in the event of war.

During the late 1950's when the Soviets could have built hundreds of the latest types of long-range bombers they constructed less than 200 as against our more than 1600. There is no indication that they intend to try to narrow this gap. At the present time, while we have a capability of a thousand ICBM's and are building many more, the Russians have built only a minor fraction of that number. Indications are that they will improve and replace rather than greatly increase the number of their missiles.

The question is whether the United States can afford the vast "overkill" capacity which seems to underly much of our military budget.

My own conviction is that we cannot afford this policy economically, politically, or morally and that if we persist in following it we will weaken our nation both at home and abroad.

The United States has used its great power in the period since World War II with a sense of responsibility and restraint. We have done a remarkable job of providing a defense shield to war-torn Europe and assisting the rebuilding of that continent. We have shared our human

and material resources with the developing countries around the world. We have buttressed the peace-keeping functions of the United Nations. There is no parallel in world history for the generous, farsighted manner in which the United States has provided world leadership and assistance since 1945.

But if our leadership is to remain effective, we must make certain that we do not fall into a rigid pattern that ignores new conditions in the world. I submit that the continuing quest for an ever larger measure of nuclear overkill makes no sense in the perspective of today.

No informed person doubts that we have the power to destroy Soviet society several times over. One recent study concluded that we could ow erase the bulk of the Russian populace more than a thousand times. ven if that estimate is 100 times too high, we would be able to destroy the Soviet Union with only a partial use of our weapons.

Before the substantial increases in our military power of the ast two years, Secretary McNamara testified that "there is no question ut that today, our Strategic Retaliatory Forces are fully capable of estroying the Soviet target system, even after absorbing an initial urprise attack."

We have been building missiles, bombs, and other weapons steadly since then so that our capacity to destroy is much greater than when he Secretary made that statement early in 1962.

Speaking of our present capability, Mr. McNamara said on Febru-

ary 6 of this year: "Allowing for losses from an initial enemy attack and attrition en route to target, we calculate that our forces today could still destroy the Soviet Union without any help from the deployed tactical air units or carrier task forces or Thor or Jupiter IRBM's.

Now, Mr. President, I ask what possible advantage there can be to the United States in appropriating additional billions of dollars to build more missiles and bombs when we already have excess capacity to destroy the potential enemy? How many times is it necessary to kill a man or a nation?

If the Secretary is correct that one quick nuclear exchange would now leave 100 million Americans dead, an equal number of Russians, and nearly as many West Europeans, is that not enough to deter anyone other than a madman from setting off such a holocaust?

And if either side yields to madness or miscalculation, can any number of arms save us?

A PROPOSED ARMS BUDGET ADJUSTMENT

I think we need to take another careful look at our enormous arms budget, asking ourselves: What part of this budget represent additions to an already surplus overkill capacity? What alternative uses can be made of surplus military funds for strengthening the economic and political foundations of our security?

Our highly able Secretary of Defense has effected many needed economies in operation. Congress can encourage him to make much larger savings by limiting the further pileup of overkill capacity.

I have pored over the complicated tables and charts of the defense budget for hours. I do not pretend to understand all of the implications. Indeed, the data as made available to Congress in the Defense budget does not enable one to perceive the full functional pattern proposed.

But I am fully convinced that there is enough talent and brainpower among our military and civilian arms experts to eliminate five billion dollars of proposed spending that goes beyond our defense needs.

A front-page story in the Sunday New York Times of June 30 reports: "The administration is giving serious consideration to ordering the first substantial cutback in the production of atomic weapons since the United States began building up its nuclear arsenal after World War II. Behind the current study is a belief that the United States with an arsenal of tens of thousands of atomic weapons has a sufficient and perhaps an excessive number of nuclear arms to meet its military needs."

The article reports "rising concern in high administration circles over the multiplying number of warheads that have been assigned to the military forces in the last five years. The major fear is that continuing profusion would only increase the chances of accidental explosion or unauthorized use of the weapons."

The Times reported a growing fear of the members of the Joint Committee on Atomic Energy that the production of atomic weapons is "coming to be based more on the capabilities of the Atomic Energy Com-

mission to manufacture them than on the actual requirements of the military."

The Atomic Energy Commission now has an annual budget of $1.8 billion to produce new warheads to add to our already enormous stockpile. The Times asserts that at a recent Pentagon press briefing "a highly placed Defense Department official" estimated that it might be desirable to make a $1 billion cut in this expenditure. Another "policy-making official" said: "We have tens or hundreds of times more weapons than we would ever drop even in an all-out war, and we have had more than we needed for at least two years." None of the sections in this important news article have been challenged by any administration spokesman so I think it is safe to assume that they are well-grounded.

I believe that in addition to a cut of $1 billion in the Atomic Energy Commission's weapons procurement program, we could wisely cut an additional $4 billion from the proposed budgets of the Air Force, Navy, and Army without reducing the security of the nation. Indeed, such reductions could enable us to strengthen our overall national security. Any substantial cut should, of course, be applied and administered with the expertise of the Secretary of Defense. I will listen thoughtfully to the presentation of our Appropriations Committee and others. I intend to follow the coming debate and discussion with a frank willingness to change my views if there is compelling contrary evidence.

It may be argued that the economy of many of our communities

has become so intertwined with military spending that an arms cut of several billion dollars which I have proposed would result in a painful economic dislocation.

It is true that many American communities have come to lean heavily on the economic stimulus of arms production and military installations. We need to accelerate and expand our efforts on the federal, state, and local level to prepare these communities for a conversion to a more permanent economy appropriate to the conditions of peace.

Competence for converting from a military to a civilian economy is a basic requirement for the economic and political security of the United States.

PLANNING THE CONVERSION TO A PEACE ECONOMY

Capability for economic conversion must be developed at all establishments -- manufacturing, research, and others -- engaged in fulfilling contracts or otherwise working for the Department of Defense or the Atomic Energy Commission.

In order to: minimize dislocation; facilitate industrial expansion; reduce regional dependence on single markets; reduce regional dependence on single government markets; and plan for growth in employment, I recommend the following procedure:

First, all establishments that fulfill Defense Department or Atomic Energy Commission work for at least one calendar year and whose personnel are 25% or more so engaged, should henceforth be required -- as a condition of contract fulfillment and acceptable administration --

to establish in their managements an operating conversion committee. This committee should actively engage in planning for conversion of the facility from military to civilian work as required in the event of termination, cutbacks. stretchout, or other curtailment of Defense or AEC requirements.

Second, in order to estimate the support that may be required to complement local and regional conversion, an Economic Conversion Commission should be established by the President under the direction of the Secretary of Commerce and including experts from other concerned government departments. Our Arms Control and Disarmament Agency already has a small but able group of people giving thought to this matter.

The Economic Conversion Commission shall have responsibility for blueprinting appropriate action by departments and agencies of the Federal Government that are required to facilitate conversion from a military to a civilian economy.

In addition to such activities as it should deem necessary, the Commission would prepare schedules of possible private and public investment patterns and the employment and income effects to be expected therefrom. The information would be reported to the President and to the Congress in preliminary form within six months after the enactment of authorizing legislation and in final form within twelve months.

The Commission would take counsel with the Governors of all

States to encourage appropriate and timely studies and conferences by the States in support of conversion from a military to a civilian economy.

Third, the Commission would, within twelve months of establishment, convene a National Conference on Economic Conversion and Growth to focus nationwide attention on the problems of conversion and economic growth and to encourage appropriate study and organization in all relevant parts of the nation's economy. This conference should include invited representatives of trade associations, trade unions, professional societies, representatives of appropriate agencies of the Federal and State governments, and selected individuals with specialized knowledge.

Through intelligent planning we can make a satisfactory transition to an economy less dependent upon arms spending.

WEAKNESSES IN AN ARMS ECONOMY

A closer look at our present level of arms spending will show that it is not an unmixed blessing now as a stimulus to our economy.

First of all, we have distorted our economy in allocating such a high percentage of our highly trained manpower, research and technology to weapons production at the expense of our other industry. Japan and our West European allies have all modernized their civilian industrial plant at a much higher rate than the United States, largely because of our concentration on arms production. This has added to our civilian production costs, decreased our efficiency, undercut our competitive

position in international trade, and aggravated the balance of payments problem.

American machine tool production was once the envy of the world, but today we have slipped to fourth or fifth rank among the nations. Our best scientific and technical competence is going into arms, not to the modernization of our civilian plant.

Building weapons is a seriously limited device for building the economy -- partly because it cannot be counted upon as a permanent system and partly because a military item leads to no further production; it is an end in itself. Disarmament chief William C. Foster said recently that "defense spending of the type we now have has no intrinsic merit in terms of its ability to create production and income as compared to other forms of demand."

Many U. S. industries are losing their capacity to compete not only in world trade but also in the United States. The concentration of capital and technical skill in arms production is a basic cause of our declining competitive ability.

As matters now stand, the U. S. Government is financing 65 per cent of all research and development and most of that is for military purposes. In Germany, by contrast, 85 per cent of research is privately financed and nearly all of it is being used to modernize civilian industries which compete with ours. Those who view military spending as an unmixed blessing to our economy should take a look at the gleaming up-to-date civilian plants in Germany, Belgium, Holland, Italy and

Japan -- plants that are surpassing our own neglected civilian production in both quality and low-cost operation. Where will this kind of imbalance leave us in the toughening competition of international trade?

The U. S. economy is jeopardized further by the flow of our gold overseas and the undermining of the dollar as a unit of international exchange. Today, we have a favorable trade balance, but because of our military investments overseas and the flight of investment capital we are suffering an unfavorable balance of payments. Heavy arms spending has aggravated a U. S. fiscal situation that has led many American investors to seek more attractive overseas outlets for their capital.

Our traditionally strong currency has been a powerful instrument in American economic and political leadership in the world. But the strain imposed on our gold reserves as a result of heavy military commitments abroad and excessive arms spending at home is a threat to our international position. The loss of American gold can be halted by reducing some of the burden we have been carrying for the defense of now prosperous allies and by encouraging the conversion of foreign claims on our gold into investments to modernize our industrial system.

While retaining our massive military power, the overriding present need of American security is prompt reinforcement of the economic and political aspects of security at home and abroad.

THE MILITARY-INDUSTRIAL COMPLEX AND AMERICAN LIFE

It is admittedly difficult to calculate the impact of the arms

budget on our civilian economy. It is even more difficult to measure the impact of what former President Eisenhower called "the military-industrial complex" on our moral strength and the climate of freedom. Americans have always feared that any trend toward militarism was a threat to the quality of our democracy. I believe that this is still a legitimate concern. Mr. Eisenhower, whose life has been devoted to military matters, was so concerned about the growing impact of the military-industrial combination on American institutions that he devoted his farewell address to this danger. "We must never let the weight of this combination endanger our liberties or democratic processes," he warned.

Democracy is based on a fundamental respect for the dignity and worth of human life. Its great strength is that it opens the way for the full flowering of man's intellectual, moral and cultural development.

When a major percentage of the public resources of our society is devoted to the accumulation of devasting weapons of war, the spirit of democracy suffers. When our laboratories and our universities and our scientists and our youth are caught up in war preparations, the spirit of free man is hampered.

America must, of course, maintain a fully adequate military defense. But we have a rich heritage and a glorious future that are too precious to risk in an arms race that goes beyond any reasonable criteria of need.

We need to remind ourselves that we have sources of strength, of prestige and international leadership based on other than nuclear bombs.

Conversely, we need to remember that the greatest Communist victories including the Chinese Communist takeover came at the moment of our greatest nuclear superiority.

The global contest raging before our eyes today will doubtless continue for as long as we can see into the future, but it need not, indeed cannot, be settled by nuclear warfare.

The United States must be prepared to lead that contest into areas that draw on our true sources of greatness -- politics, economics, and morality. There is a growing indication that the course we follow may play a major part in determining the course which our adversaries take for good or ill.

The self-defeating nature of the arms race is that each side reacts to the other's moves in a constantly rising scale of armaments. In his Congressional testimony earlier this year, Secretary McNamara explained how the United States tries to evaluate expected Soviet arms moves so that we can plan to counter their efforts by moves of our own. "We are, in effect," said the Secretary, "attempting to anticipate production and deployment decisions which our opponents themselves may not yet have made."

Is it not reasonable to assume that just as we attempt to counter arms moves by the Soviets, so do they try to gear their efforts

to counter ours? Could we not then well afford to make a serious effort to put the arms race in reverse by carefully calculated moves designed to shift the competition with Russia away from arms spending into more peaceful pursuits.

OUR UNMET PUBLIC NEEDS: AN ALTERNATIVE TO OVERKILL

We have millions of idle youth who could be employed in existing job vacancies if only they had sufficient training and education. A sizeable proportion of these are Negroes and their idleness is at the base of the explosive cival rights crisis now convulsing the nation. What better use could we make of some of our excess military spending than to divert it to an expanded program of vocational and technical training?

Our civil rights problems require for their solution a major expansion of employement opportunity. The economically depressed regions of the country require fresh capital and technical talent. Both these basic problems of economic development require sizeable productive investment.

We have an urgent need for more classrooms, laboratories, libraries and capable teachers.

We have millions of citizens, particularly among our older people, who need more adequate hospital and nursing home care.

Some of our present defense installations might in the future be converted into vocational schools, community colleges, or health centers.

We have rivers and streams to be saved from pollution and waste -- a task calling for considerable engineering and technical manpower.

We have a growing number of farm youth who can no longer make an adequate living on the farm whose lives would be enriched by an expanded rural area development effort.

And for years to come there will be hungry, afflicted people abroad who look to us for help. As the former director of our nation's Food for Peace Program, I came to a keen realization that most of the people of the world are undernourished rural families who are trying to scratch an existence from the soil by incredibly primitive methods.

We have an opportunity with our amazing agricultural know-how to use an increased volume of farm products and agricultural assistance as development tools abroad. The recent World Food Congress held in Washington underscored the fact that mankind now has the scientific capacity to eliminate hunger from the world.

I think that we should seriously consider diverting $5 billion of our arms budget into the kind of worth-while programs at home and abroad which I have just sketched. Perhaps some of the military reductions should be expressed in ban reduction. This move would not only result in a stronger and better America, but it might invite a constructive response from the Soviet Union. The Soviets have more to gain than we from a reduction of military spending. They have deprived themselves

of the appliances, automobiles, attractive clothing and personal comforts which we take for granted.

The cold war is now showing some signs of a possible limited thaw. In his inspired address to the nation last Friday evening, President Kennedy described in cautious but hopeful terms the larger meaning of the proposed nuclear test ban as a first important step to peace. I trust that after careful consideration the Senate will lend its support to this initiative for peace.

As we weigh the proposed test ban agreement, we can usefully take into account three factors that I have discussed today.

First, when both sides already possess overkill capacity, that lessens the temptation for either side to break the test ban.

Second, some Americans may wonder if the next steps, after a test ban agreement, might not mean declining military spending and a sag in our economy. I am confident that practical steps which I have outlined for preparing and supporting economic conversion will reassure our people on this count.

Third, the test ban agreement can lead to savings of many millions of dollars from the funds hitherto used for large-scale testing.

There are hopeful signs other than the proposed test ban. The myth of a solidly united, monolithic Communist bloc was long ago thrown in doubt by Tito. But how much more significant is the mounting evidence of a major convulsion of the Sino-Soviet Bloc! We should watch

these new devlopments with caution, knowing well that while Communist powers may differ with each other, they continue to follow a tyrannical system that is alien to American democracy. But we must also keep from a rigid diplomacy or excessive reliance on arms that might jeopardize our capacity to exploit for peace these fast-developing changes in the international climate.

Thirteen years ago, the late Senator Brien McMahon, chairman of the Joint Committee on Atomic Energy, made two memorable addresses from the floor of the Senate. The Connecticut Senator warned that a continuance of the arms race would lead sooner or later to catastrophe, and in any event would induce a climate of fear and a government-controlled allocation of resources that would dry up the wellsprings of American freedom and dignity. The Senator concluded, on March 1, 1950, with this warning: "Mr. President, the clock is ticking, ticking, and with each swing of the pendulum the time to save civilization grows shorter. When shall we get about this business? Now, or when Russia and the United States glower at one another from atop competing stacks of hydrogen bombs?"

We have arrived at the point in history where we indeed "glower at one another from atop competing stacks of hydrogen bombs." And if the present trend continues, in a few short years a half dozen and then a dozen new powers will climb atop their hydrogen stockpiles to glower at their frightened neighbors.

The clock which Senator McMahon heard ticking thirteen years ago is still ticking, but our ears have become so accustomed to the sound that we scarcely hear it. Yet, scientists of our day flatly assert that if we do not reverse the arms race, a major nuclear accident will occur before this decade ends even without the intent of the nuclear powers. And how can we rest secure knowing that any one of three, six, or a dozen national defense ministries or subordinate military officers could set off a nuclear holocaust through miscalculation, impulsive madness, or simply human wickedness.

There are powerful options of peace as well as options of war. Still alive in the world is a faith that can move mountains if we will only seize upon it. From our own heritage the philosophy of Jefferson and Lincoln speak with a voice that is more effectively heard in Asia, Africa, and Latin America than any number of nuclear explosions or moon shots. A conscientious effort on our part to eliminate excessive nuclear stockpiling will give that voice of peace and reason an even clearer tone

I pray that our country will in every possible way use its unique power and influence on the side of peace. I know that is what President Kennedy and his administration seek. I am sure that is the sense of the Congress and the American people. I even dare to believe that is what Mr. Khrushchev and his people have come to accept as the only condition of their survival.

Both Americans and Russians must make a choice between the quick and the dead. Negotiators of the test ban proposal have cast their lot

on the side of hope and life. The further steps to peace will be torturous and hard, but they lead, however slowly, away from catastrophe toward salvation.

If we hold fast to that course, taking into account the new conditions of American security, generations to come will call us blessed, and, as peacemakers, we shall know the Scriptural promise: "The Lord will give strength unto his people; the Lord will bless his people with peace."

Duplicated as a public service
THE UNITED PRESBYTERIAN PEACE
FELLOWSHIP
14 Harvey St., Ironia, N. J.
07845
George Williams Ball,
Treasurer

United States Senate

COMMITTEE ON FOREIGN RELATIONS

HH—
As you requested,
here's McMahon
Res. material—
John S.

August 14, 1963

MEMORANDUM

TO: John G. Stewart

FROM: Carl Marcy CM

RE: S. Con. Res. 47 (McMahon Resolution)

Senator McMahon, for himself and 10 other Senators, introduced S. Con. Res. 47 on September 18, 1951. The resolution called on the Congress to advocate and recommend that the General Assembly "devote itself to the single purpose of stopping the armaments race by speeding agreement upon . . .disarmament and control covering (armaments and atomic weapons)."

The resolution also provided that the Congress when "an effective and enforceable system of world-wide disarmament and control takes effect" would appropriate "a substantial portion of all money saved for a period of five years, such sums to be expended by the United Nations for peaceful development of atomic energy technical-assistance programs to underdeveloped areas, and general economic aid and assistance to all war-ravaged countries;".

No action was taken by the Congress on this resolution.

In the 83rd Congress, 1st Session, Senator Smith of New Jersey introduced a resolution, S. Res. 150, which passed the Senate on July 29, 1953 which stated that it was the declared purpose of the United States to seek by all peaceful means (through the United Nations) agreement by all nations for enforceable limitation of armament. . .to the end that a greater proportion of the world's productive capacity may be used for peaceful purposes and for the well-being of mankind. . ."

And in the 84th Congress, 1st Session, Senator Symington, for himself and 44 other Senators, introduced a resolution which called for a ceiling on the proportion

of each country's resources which "may be utilized for military purposes. . . .so as to increase steadily the proportion devoted to improving the living levels of the people (of the world)."

These two resolutions thus in part cover the ideas embodied in the resolution of 1951; they do not establish the definite formula of appropriation of funds to the United Nations for the purposes of development of underdeveloped countries.

Copies of the three resolutions are enclosed.

Enclosures

82D CONGRESS
1ST SESSION

S. CON. RES. 47

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 18 (legislative day, SEPTEMBER 13), 1951

Mr. MCMAHON (for himself, Mr. FULBRIGHT, Mr. MORSE, Mr. SPARKMAN, Mr. HENDRICKSON, Mr. GILLETTE, Mr. BENTON, Mr. HILL, Mr. LEHMAN, Mr. MOODY, and Mr. MURRAY) submitted the following concurrent resolution; which was referred to the Committee on Foreign Relations

CONCURRENT RESOLUTION

Whereas the peoples of the earth are plunged, against their will, in an accelerating armaments race that involves atomic bombs, biological and chemical agents, and conventional weapons; and

Whereas the prospect of the hydrogen bomb propels the peoples of the earth into danger above and beyond anything heretofore conceived by man; and

Whereas, in history, armaments races have always led to war; and

Whereas the United States is unshakably determined to keep strong so long as its strivings to halt the armaments race through just and dependable international agreement are thwarted; and

Whereas United States efforts to achieve international control

over all weapons do not flow from craven fear or weakness but rather from the strength of democratic institutions, faith in freedom, belief in the value and worth of the human individual everywhere, and from trust in Almighty God and His laws: Now, therefore, be it

Resolved by the Senate (the House of Representatives concurring), That the Congress of the United States appeal to the peoples of the world to join in a great moral crusade for peace and freedom;

That the Congress of the United States advocate and recommend that the next session of the General Assembly of the United Nations devote itself to the single purpose of stopping the armaments race by speeding agreement upon effective and enforceable disarmament and control covering conventional armaments, biological and chemical agents, and atomic and hydrogen bombs;

That the Congress of the United States, as tangible evidence of its good faith, pledge itself to appropriate and to make available to the United Nations—when an effective and enforceable system of world-wide disarmament and control takes effect—a substantial portion of all money saved for a period of five years, such sums to be expended by the United Nations for peaceful development of atomic energy, technical-assistance programs to underdeveloped areas, and general economic aid and assistance to all war-ravaged countries;

That the Congress of the United States call upon all other governments to make a like pledge; and, therefore,

That copies of this resolution be transmitted to the Secretary-General of the United Nations and to each United Nations delegate and also that copies be transmitted to the presiding officer of every national parliament, congress, and deliberative assembly throughout the world.

people's minds the idea that the United States seeks war, that its soldiers lust for blood, that its strength is devoted but to the building of military might which threatens peace, and the construction for itself of luxury items at the expense of the ill-fed, the ill-housed, and the ill-clothed of this world.

Hard as it is to believe, the constant din of Soviet propaganda has an effect on some people despite the fact that American actions completely deny Soviet propaganda. Soviet words make people forget the fact that the United States has fought two world wars in defense of free men and fights now in Korea to protect all independent nations from the threat of military aggression. Vitriolic Communist words make people overlook the fact that the United States has poured forth its wealth since the war to rebuild devastated Europe, to feed the children of this earth, to help by technical assistance the underdeveloped areas all over this globe. They make the people of this earth forget that it was the United States which, after World War II, as after World War I, was one of the first to lay down its arms and turn to peaceful pursuits.

It is for these reasons that we must repeat again and again the truth. The people of the United States and the free world have learned in these years since the war that Soviet designs which cannot be accomplished by subversion may be sought by military force. We have learned that efforts in the United Nations to provide for the control of armaments and to set up a reasonable international inspection system to assure free people that malevolent force is not built behind their backs have not been acceptable to the Soviet Union and its satellites. We have learned that the only defense of freedom lies, unfortunately, in building adequate defense against aggression. We have learned that until communism mends its ways freedom must rely on military defense if it is to survive. It is for these reasons that we, in cooperation with independent states the world over, have had to see to our defenses.

And yet this very defense we must build if free men and states are to survive, is distorted by blatant propaganda which uses words like "warmongers" to describe those United Nations who defend freedom in Korea, and applies the words "peace loving" to those nations which, behind the backs of the United Nations, pours arms into Korea to support naked aggression.

It is these facts that move the Committee on Foreign Relations to urge the Senate to adopt the pending resolution so we may begin now to repeat the fundamental desire of our people for peace and for the reliable control of armaments, to the end that freemen may put their backs to the job of building a peaceful world devoted to the well-being of mankind.

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208. LIMITATION OF ARMAMENTS RESOLUTION, JULY 29, 1953[1]

Whereas the peoples of the earth are plunged into vast armament expenditures which divert much of their effort into the creation of means of mass destruction; and

Whereas the American people and the Congress ardently desire peace and the achievement of a system under which armaments, except for the maintenance of domestic and international order, will be-

[1] S. Res. 150, 83d Cong., 1st sess.

come unnecessary while at the same time the national security of our own and other nations will be protected; and

Whereas it is the policy of the Government of the United States to seek the honorable termination of present armed conflicts, and the correction of oppression and injustice and other conditions which breed war; and

Whereas progress in these respects would strengthen world trust so that the nations could proceed with the next great work, the reduction of the burden of armaments now weighing upon the world: Now, therefore, be it

Resolved, That it continues to be the declared purpose of the United States to seek by all peaceful means the conditions for durable peace and concurrently with progress in this respect to seek, within the United Nations, agreements by all nations for enforceable limitation of armament in accordance with the principles set out in the President's address of April 16, 1953, namely—

(1) the limitation, by absolute numbers or by an agreed international ratio, of the sizes of the military and security forces of all nations;

(2) a commitment by all nations to set an agreed limit upon that proportion of total production of certain strategic materials to be devoted to military purposes;

(3) international control of atomic energy to promote its use for peaceful purposes only and to insure the prohibition of atomic weapons;

(4) a limitation or prohibition of other categories of weapons of great destructiveness; and

(5) the enforcement of all these agreed limitations and prohibitions by adequate safeguards, including a practical system of inspection under the United Nations;

to the end that a greater proportion of the world's productive capacity may be used for peaceful purposes and for the well-being of mankind: and be it further

Resolved, That copies of this resolution be transmitted to the President of the United States and the Secretary of State, and that the President make known the sense of this resolution to the United Nations and to the heads of state of the nations of the world with the request that their people be informed of its contents.

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89. REPORT OF THE SENATE COMMITTEE ON FOREIGN RELATIONS ON APPOINTING A SUBCOMMITTEE TO WORK TOWARD THE GOAL OF WORLD DISARMAMENT, JUNE 14, 1955 [1]

The Committee on Foreign Relations having had under consideration Senate Resolution 93 authorizing a subcommittee of the Foreign Relations Committee, in conjunction with other Senators not members of the committee, to make a full and complete study of proposals looking toward disarmament and the control of weapons of mass destruction, reports the resolution to the Senate with amendments, and recommends that it be agreed to.

[1] U. S. Congress. Senate. Report No. 547, 84th Congress, 1st session.

84TH CONGRESS
1ST SESSION

S. RES. 71

IN THE SENATE OF THE UNITED STATES

MARCH 2, 1955

Mr. SYMINGTON (for himself, Mr. ANDERSON, Mr. BARRETT, Mr. BEALL, Mr. BRIDGES, Mr. CAPEHART, Mr. CASE of South Dakota, Mr. CHAVEZ, Mr. CLEMENTS, Mr. DIRKSEN, Mr. ELLENDER, Mr. ERVIN, Mr. GORE, Mr. HAYDEN, Mr. HILL, Mr. HUMPHREY, Mr. IVES, Mr. JACKSON, Mr. KEFAUVER, Mr. KERR, Mr. KILGORE, Mr. LANGER, Mr. LEHMAN, Mr. LONG, Mr. MAGNUSON, Mr. MANSFIELD, Mr. MCCLELLAN, Mr. MCNAMARA, Mr. MONRONEY, Mr. MORSE, Mr. MURRAY, Mr. NEELY, Mr. NEUBERGER, Mr. PASTORE, Mr. PAYNE, Mr. POTTER, Mr. PURTELL, Mr. ROBERTSON, Mr. SCOTT, Mr. SMATHERS, Mr. SPARKMAN, Mr. STENNIS, Mr. THURMOND, Mr. THYE, and Mr. YOUNG) submitted the following resolution; which was referred to the Committee on Foreign Relations

RESOLUTION

Whereas low living standards are one of the primary causes for war and improved living standards promote peace; and

Whereas such improved living standards can be attained only if world resources, both human and material, are devoted in increasing amounts to peaceful purposes; and

Whereas a major power has recently announced an increase in its armaments budget and has proclaimed as policy the expansion of arms production and war-supporting industry at the sacrifice of civilian production: Therefore be it

Resolved, That the President of the United States be requested to present to the United Nations this proposal to explore the possibilities of limiting the proportion of every nation's resources devoted to military purposes, both direct and indirect, so as to increase steadily the proportion devoted to improving the living levels of the people; and be it further

Resolved, That any such limitation provide adequate means of inspection and control and be made part of any comprehensive regulation, limitation, and balanced reduction of all armed forces and armaments; and be it further

Resolved, That the exploration of the possibilities of this method of disarmament be pursued to gain recognition for the principle that the way any government divides its resources can be taken as a measure of its peaceful or aggressive intent; also for the principle that high living standards constitute an automatic built-in deterrent against aggression and that any nation which deliberately and persistently holds down the living levels of its people to build military power is a threat to world security; also for the principle that the conversion time that must elapse before resources can be shifted from peaceful to war purposes can be used as a basis for preventing possible aggression before it takes place; and be it further

Resolved, That to implement these principles consideration be given to the following:

An adequate number of key resources be selected and standards be drawn up for determining what ratio of each of these resources should be set as a maximum ceiling limiting the proportion of each of these resources which may be utilized for military purposes.

Along with each such ceiling adequate measures of inspection and control be enforced to prevent the diversion or conversion for military purposes of resources committed for peaceful uses, also that any such acts of diversion or conversion be considered automatic evidence of aggressive intent.

The ceilings limiting the possible military uses should be set to attain a major increase in living levels, to provide adequate warning before any of these resources can be converted to war production and to contribute to other arms and armament controls.

These ceilings be subject to periodic revision by agreement among the participating nations with the view of providing balanced security and progressively to increase the proportion of all resources to be committed to peaceful uses, provided that it be recognized a "freeze" of existing resources allocations cannot be taken as a starting stage because

it would freeze a pattern of continuing aggression for some nations, while keeping others relatively defenseless.

Ceilings upon the military uses of these key resources be established to the end that no nation's economic expansion be curbed.

In setting such ceilings, allowance be made for the special economic needs of individual nations, particularly those with underdeveloped economies; and be it further

Resolved, That the President be further requested to direct the appropriate Government agencies to complete studies now underway, or to undertake any new studies that might be needed to carry through the objectives of this resolution.

August 20, 1963

Memo to John S.

cc: John R.
Bill C.

From Senator

You may recall your memo to me of August 14 that came from Carl Marcy concerning the so-called McMahon Resolution and other proposals dealing with disarmament and the ultimate savings from reduction in arms. I want you to discuss this matter with John Rielly and Bill. I want you also to discuss it in light of the splendid message delivered by George McGovern about two weeks ago and of course my own concern in this whole matter of the economic impact of disarmament. What we would do/if any disarmament really came and what the effect would be on our economy.

I never believed that our government has really dramatized our sincere interest in disarmament. And I am afraid that the longer we fail to really pin down this genuine desire of the American people for peace in our public pronouncements the more determined the defense industries become to maintain the defense program and the arms program. There is beginning to be a vested interest in this arms production. President Eisenhower's farewell address on this subject is a masterpiece. By the way, I don't have a copy of the address and I would like to get it. I want to read it again and again because I think this man left office giving the American people a warning second only to the farewell address of George Washington, which was plenty timely for his day and age.

Now with this as a background, I suggest that we start to prepare an appropriate resolution relating to the desires of the American people

for a just and enduring peace, the desire of the American people in their representative government to reduce the burden of the cost of arms, the desire of the American people to reduce the cost of arms for all humanity, the concern of the American people over the arms race, the concern of the American people over accidental war, the concern of the American people over the economic plight of others as well as our own. Then expressing our belief that if nations could turn their swords into plowshares and their spears into pruning hooks that we would soon have a better world and one that was moving ahead as Divine Providence had hoped it would. To put it more simply, armament is just getting to be too costly for anybody but the super states and the unbelievably rich, and yet these small countries impoverished and backward try to have armies, navies and air forces at terrible cost to their people and their economic development. We ought to try to show how arms control is in the self-interest of every country. Imagine what it could mean to the Middle East if these countries didn't spend money on armament. I think it would be interesting to find out just how much all of these countries are spending. Imagine what it could mean in South America if they didn't spend money on armament. It would be of interest for example how much money is being spent in Latin America on armament. The rate of illiteracy is staggering. Poverty is everywhere and yet countries and governments spend money on armament. How ridiculous this is! And then take a look at the Middle East and North Africa, and even the other African countries are now getting involved in the arms race. Then add to this the terrible

cost of armament in Western Europe and Eastern Europe and Asia. It is fantastic. Here's India trying to make a democratic system work and is being plagued with the cost of armament because of the menace of China, and a fear of Pakistan. And here's Pakistan with poverty running out of its ears and yet it is spending so much money. I think we could develop a terrific case, but it will require documentation. So I think we ought to start putting the material together, going from country to country and continent to continent showing how the monies and resources are being wasted on armaments. Showing what can be done if these monies are directed into constructive paths - in education, in highways, in power, in industry, in health, and all the many things that are needed. And then we can also appeal to the people behind the Iron Curtain particularly in the Eastern European countries where they seem to hunger for a little better standard of living. I want to develop a real speech on this and above all I want to develop a resolution that we could pass in this Congress before our delegation goes to the United Nations. I want to see our country continue on in this quest for peace. I want the President to go to the United Nations with another powerful address as he did in 1961. And I want that address along the lines of the one he did at American University. I am going to be working on President Kennedy to get him to make that kind of speech and I predict I will have him up there at the United Nations giving a powerful speech for peace. But before that happens, I want the Congress of the United States to pass a resolution along the lines of what we are talking about in this memorandum, but I will need documentation - I need to know what is going on. I pointed out not long ago that we were spending at the rate of $14 million dollars per hour for armament. Think of that! That the United States and the Soviet Union

were responsible for 70 percent of the $120 billions of dollars spent on armament by the whole world.

Well, these are some of the things that I have in mind and the memorandum from Carl Marcy to John Stewart of August 14 is helpful. But I want to build on it and make the next one much better.

File
Disarmament
work file

September 12, 1963

Memo for Senator
From Senator

I am to send Bill Benton some material on the Bryan MacMahon resolution concerning savings on an arms cut and how these savings could be invested for development and economic improvement.

Also, he wants material on the economic impact of disarmament and all that we are doing on it.

I am to also send some cheese to the Vanochurs and the O'Briens, that is, if we have any more of that good Minnesota blue cheese. I should check on this out to the house.

[July 1964]

AGENDA ITEM—PEACE

An Elaboration of President Johnson's Proposals to the Eighteen-Nation Committee on Disarmament at Geneva, Switzerland

AGENDA ITEM—PEACE

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UNITED STATES ARMS CONTROL AND DISARMAMENT AGENCY
PUBLICATION 23

Released July 1964

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Foreword

ON JANUARY 21, 1964, THE EIGHTEEN-NATION COMMITTEE ON DISARMAMENT RESUMED ITS DISCUSSIONS IN GENEVA.

Of immediate interest to the delegates of the 17 nations actually represented at the conference table[1] was a message from the President of the United States. President Johnson's message outlined five major proposals designed, as he later told an American radio and television audience, ". . . to take further steps toward peace, enforcible steps which can endanger no one's safety and will enlarge everyone's security." Three of the five were addressed to an immediate and paramount concern posed by the nuclear arms race. Earlier President Kennedy had noted this concern when he said, ". . . in today's world a nation's security does not always increase as its arms increase when its adversary is doing the same. . . ." Later President Johnson elaborated upon this concern when he said, "In a matter of moments you can wipe out from 50 to 100 million of our adversaries or they can, in the same amount of time, wipe out 50 to 100 million of our people, taking half of our land, half of our population in a matter of an hour. So general war is impossible and some alternatives are essential."

With President Johnson's message as its starting point, this pamphlet presents an edited version of statements by the U.S. representatives at the Geneva conference which describe in some detail the President's proposals directed toward early action to reduce the nuclear war threat through the control of modern weapons of mass destruction.

The proposals as elaborated in the statements which follow were reviewed by the Secretaries of State and Defense, the

[1] France, the 18th nation, has not participated in the conference since its initial meeting in March 1962.

Chairman of the Joint Chiefs of Staff, the Director of the Arms Control and Disarmament Agency, the Chairman of the Atomic Energy Commission, and the Special Assistants to the President for National Security Affairs and for Science and Technology, among others, prior to Presidential approval to insure that they were fully consistent with our national security policies.

Message of President Johnson to the Conference of the Eighteen-Nation Committee on Disarmament at Geneva, Switzerland, at the Reconvening of the Conference on January 21, 1964

THERE IS ONLY ONE ITEM ON THE AGENDA OF THIS CONFERENCE—IT IS THE LEADING ITEM ON THE AGENDA OF MANKIND—AND THAT ONE ITEM IS PEACE.

Already this Conference has led to more concrete and effective results than any disarmament Conference in modern history. Your efforts and deliberations laid the groundwork for the nuclear test ban treaty—for the communications link between Washington and Moscow—and for the U.N. General Assembly action against nuclear weapons in space.

Today your search begins anew in a climate of hope. Last year's genuine gains have given us new momentum. Recent Soviet and American announcements of reduction in military spending, even though modest, have brightened the atmosphere further. Let us pray that the tide has turned—that further and more far-reaching agreements lie ahead—and that future generations will mark 1964 as the year the world turned for all time away from the horrors of war and constructed new bulwarks of peace.

Specifically, this nation now proposes five major types of potential agreement:

1) *First,* as Chairman Khrushchev and I have observed, the use of force for the solution of territorial disputes is not in the interest of any people or country. In consultation with our

allies, we will be prepared to discuss means of prohibiting the threat or use of force, directly or indirectly—whether by aggression, subversion, or the clandestine supply of arms—to change boundaries or demarcation lines; to interfere with access to territory; or to extend control or administration over territory by displacing established authorities.

2) *Second*, while we continue our efforts to achieve general and complete disarmament under effective international control, we must first endeavor to halt further increases in strategic armaments now. **The United States, the Soviet Union and their respective allies should agree to explore a verified freeze of the number and characteristics of strategic nuclear offensive and defensive vehicles.** For our part, we are convinced that the security of all nations can be safeguarded within the scope of such an agreement and that this initial measure preventing the further expansion of the deadly and costly arms race will open the path to reductions in all types of forces from present levels.

3) *Third*, in this same spirit of early action, **the United States believes that a verified agreement to halt all production of fissionable materials for weapons use would be a major contribution to world peace.** Moreover, while we seek agreement on this measure, the U.S. is willing to achieve prompt reductions through both sides closing comparable production facilities on a plant by plant basis, with mutual inspection. We have started in this direction—we hope the Soviet Union will do the same—and we are prepared to accept appropriate international verification of the reactor shut-down already scheduled in our country.

4) *Fourth*, we must further reduce the danger of war by accident, miscalculation or surprise attack. In consultation with our allies, we will be prepared to discuss proposals for creating a system of observation posts as a move in this direction.

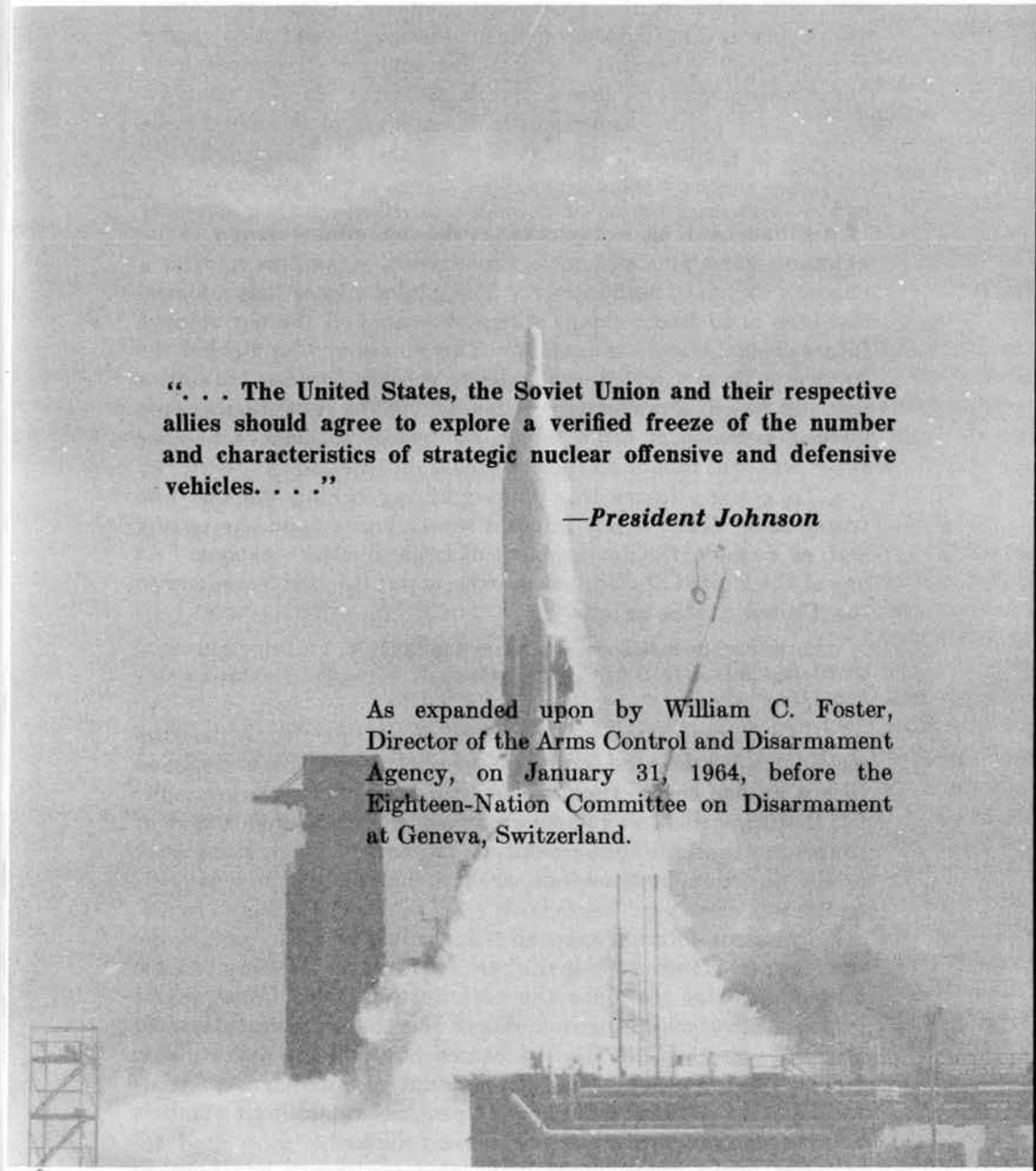
5) **Fifth, and finally, to stop the spread of nuclear weapons to nations not now controlling them,** let us agree:

(a) that nuclear weapons not be transferred into the national control of states which do not now control them, and that all transfers of nuclear materials for peaceful purposes take place under effective international safeguards;

(b) that the major nuclear powers accept in an increasing number of their peaceful nuclear activities the same inspection they recommend for other states; and

(c) on the banning of all nuclear weapons tests under effective verification and control.

Each of these proposed steps is important to peace. No one of them is impossible of agreement. The best way to begin disarming is to begin—and the United States is ready to conclude firm agreements in these areas and to consider any other reasonable proposal. We shall at all times pursue a just and lasting peace—and with God's help, we shall achieve it.



". . . The United States, the Soviet Union and their respective allies should agree to explore a verified freeze of the number and characteristics of strategic nuclear offensive and defensive vehicles. . . ."

—President Johnson

As expanded upon by William C. Foster, Director of the Arms Control and Disarmament Agency, on January 31, 1964, before the Eighteen-Nation Committee on Disarmament at Geneva, Switzerland.

THIS PROPOSAL IS PATTERNED AFTER MEASURES WHICH HAVE ALREADY BEEN SUCCESSFULLY NEGOTIATED, MEASURES HAVING A COMMON GENERAL PHILOSOPHY. This philosophy is that a logical first step is to freeze things where they are and thereby remove future obstacles to disarmament. This philosophy lay behind the Antarctic Treaty, which was easier to achieve because Antarctica was still free of armaments. It lay behind the resolution against nuclear weapons in orbit, which was easier to achieve because space was still free of weapons of mass destruction.

To a large degree this philosophy lay behind the test ban treaty also. That treaty imposes severe limits upon the testing and, as a result, the development of larger nuclear weapons. As one of the United States nuclear experts put it in his testimony to the United States Senate:

> In the very large weapon area, where the U.S.S.R., I believe, is ahead of the United States, little further progress could be made by either country under the treaty.

The United States accepted this limitation mainly because we did not feel the need for very large nuclear weapons and wished to put an end to the race to make them larger and larger. We felt that the easiest way to disarmament was to stop this part of the arms race and to turn around so that we could begin going back in the direction from whence we had come. In this sense, the treaty was clearly a "freeze."

President Johnson's second point would be a "freeze" in the same sense. It would halt the race for more and better strategic nuclear vehicles and open the path to reductions from present levels in all types of forces. Where the test ban treaty limited warhead size, and the United States proposal for a fissionable material cutoff would limit the amount of explosive materials available for warheads, the present proposal would limit numbers and characteristics of strategic nuclear vehicles.

For many years—even while this conference has been in

session—both sides have increased the numbers of their strategic nuclear vehicles to a substantial extent. In so doing both have simply added to the amounts of their materials of war which must be destroyed if disarmament is to be achieved. To achieve it, we must stop the increases above present levels, increases which seem inevitable in the absence of agreement.

Two months before his death President Kennedy said:

> For too long both of us have increased our military budgets, our nuclear stockpiles, and our capacity to destroy all life on this hemisphere—human, animal, vegetable—without any corresponding increase in our security.

President Johnson's "freeze" proposal is a major step to halt this process at present levels in a way which actually could be carried out in a reasonable period of time.

President Johnson said: "The best way to begin disarming is to begin." To do so, we must stop going in the direction we have been going and turn around. This would make steps in the direction of disarmament—steps involving physical destruction of armaments—more meaningful. As President Johnson said, this method would "open the path to reductions in all types of forces from present levels."

The best place to begin is with strategic nuclear vehicles. We have singled them out for three reasons. We believe first attention should be directed to the long-range weapons of greatest destructiveness. We believe a freeze on these weapons can be achieved with effective inspection requirements which would be less than those required for a general and complete disarmament program limiting all major armaments across the board. Finally, we believe we should focus on these weapons because they are among the most expensive to develop and produce.

The Soviet Union has long urged that we begin disarming with nuclear delivery vehicles. Moreover, in several statements Premier Khrushchev has made the point that long-range rockets with nuclear tips are the most destructive weapons. He did so, for example, in speeches on 14 January 1960 to the Supreme Soviet, to a Moscow election rally on 16 March 1962, and to the Moscow Congress for General Disarmament and Peace on 10 July 1962. There have been claims by both sides to superiority in strategic nuclear forces. Regardless of which side is ahead, these are the weapons which appear most threatening to all countries.

We suggest that the specifics of the freeze be explored by allies on both sides before detailed negotiations are undertaken. For our part, of course, we would give weight to the general reaction

which delegations may wish to express here in the near future. To assist in their consideration, we suggest that the following be explored:

First, the freeze should, we believe, include strategic missiles and aircraft. The categories of weapons affected should be defined along lines of range and weight. For this measure, the categories suggested in stage I of the United States outline of 18 April 1962 should be adjusted, we think, for several reasons. For instance, there have been changes in technology since those earlier categories were proposed. Moreover, the freeze would include only strategic categories; and it could be implemented before agreement on general and complete disarmament.

Secondly, the United States believes the freeze should also include anti-ballistic-missile systems. A freeze on strategic delivery systems without a freeze on antimissile systems would be destabilizing and therefore unacceptable.

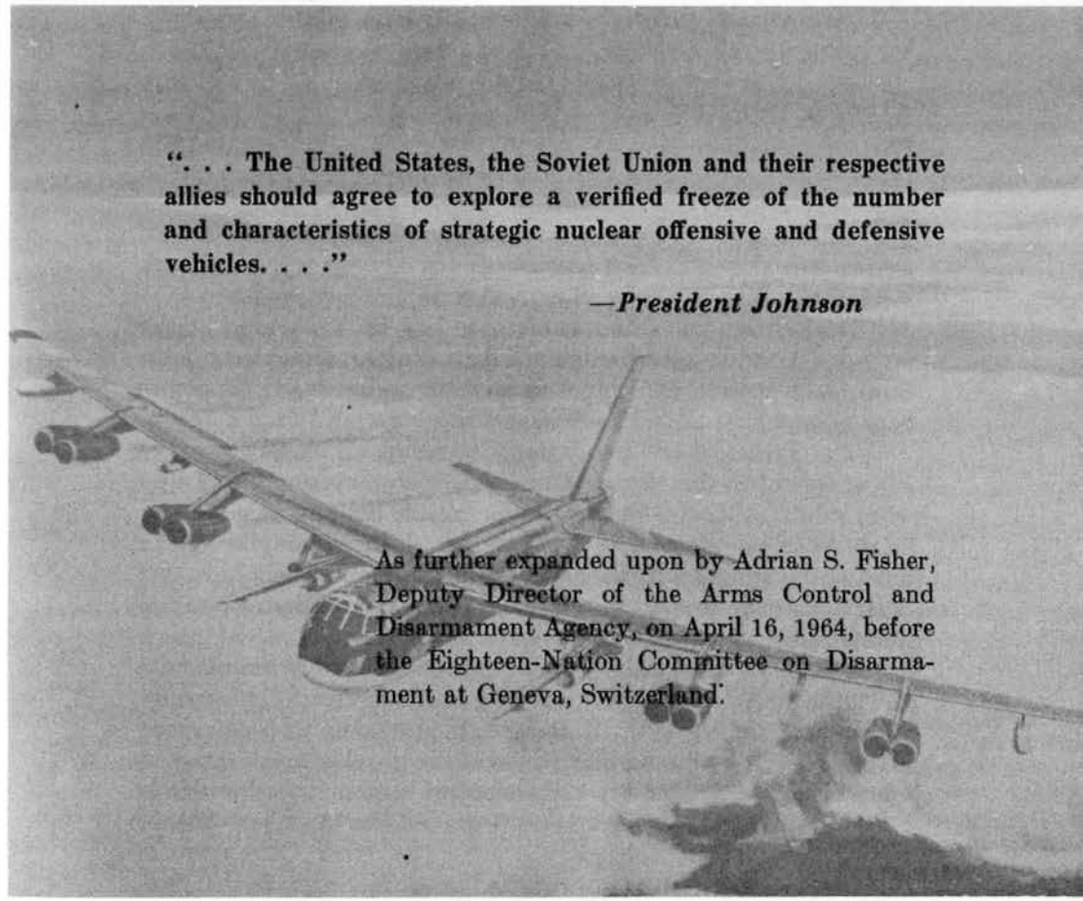
Thirdly, the immediate objective of the freeze on numbers should be to maintain the quantities of strategic nuclear vehicles held by the East and the West at constant levels. As we see it, the agreement should provide for a suitable number of missile tests without warheads to insure that missile systems continue to be reliable over a period of time. For this and related purposes, it should also provide for production of replacements on a one-for-one basis: one missile produced for one destroyed. This should not, of course, permit any increase by either side in the constant level which it is the purpose of the agreement to maintain.

Fourthly, the objective of the freeze on characteristics should be, the United States believes, to prevent the development and deployment of strategic vehicles of a significantly new type. Like the freeze on numbers, this should apply to defensive as well as offensive vehicles. The significance of this provision might well be greater than that of the freeze on numbers. It would halt the race to produce better strategic vehicles to carry bigger warheads. It would mean an end to the qualitative, as well as to the quantitative, strategic arms race.

Fifthly, as I have already indicated, we have singled out strategic vehicles partly because we believe that the verification requirements would be less onerous than for a production freeze on the entire range of major armaments included within our general and complete disarmament plan. One possible means of verifying the freeze would be to monitor significant existing production and testing facilities which each side would declare, and to provide for a specified number of spot checks to guard against possible undeclared facilities.

That is an example of the kind of verification requirement we have in mind. Additional problems would remain. However, we believe verification can be effective without being burdensome. We would hope that a system acceptable to all concerned could be worked out.

The freeze we wish to explore would have important advantages for all states. It would curb a key area of the arms race; it would inhibit development of costly, new, and more destructive weapon systems; it would be an accomplishment far beyond any "confidence building" measure in significance, yet one that could be achieved in a reasonable period of time; it would lay a firm basis for the achievement of the balanced reductions contemplated in the Joint Statement of Agreed Principles; it would tend to reduce any fears which may exist that either side could achieve a decisive first-strike capability; it would permit significant reduction of military expenditures; it would help to reduce tensions and accelerate the forward movement toward general disarmament.


". . . The United States, the Soviet Union and their respective allies should agree to explore a verified freeze of the number and characteristics of strategic nuclear offensive and defensive vehicles. . . ."
—President Johnson
As further expanded upon by Adrian S. Fisher, Deputy Director of the Arms Control and Disarmament Agency, on April 16, 1964, before the Eighteen-Nation Committee on Disarmament at Geneva, Switzerland.

DURING THE PAST FEW YEARS THIS CONFERENCE HAS BEEN LIVING WITHIN THE LENGTHENING SHADOW OF AN ARMS RACE. Our task has been to shed the light which will wipe out this shadow.

During that time this conference has been working in the face of a paradox—the paradox of increasing armaments on both sides, paid for in spiraling costs, resulting in increased danger to both sides rather than increased security.

The President of the United States, in his message to the conference of 21 January of this year, offered a program to stop what would otherwise become an inexorable buildup of more and more weapons of greater and greater destructive power. In putting this program forward the President emphasized, ". . . we must first endeavor to halt further increases in strategic armaments now."

Because it could halt further increases in strategic armaments now, the most significant and potentially far-reaching measure which the President of the United States put before this conference is that dealing with a verified freeze of the number and characteristics of strategic offensive and defensive nuclear vehicles. It is this measure which the United States would like to explore further in this Committee.

We have all heard the awesome figures dealing with the number of nuclear delivery vehicles now planned to be built during the next few years. Chairman Khrushchev has stated the intentions of the Soviet Union graphically. He has talked of rockets being produced like sausages.

The United States has recently indicated that its force now contains more than 750 operational long-range ballistic missiles. The United States has announced that that number will rise, under present plans, to more than 1,700 during the next few years.

During the period when this conference has been going on—while we have been discussing at this table the means of reducing arms—strategic armaments have been increasing at a rapid rate. The figures that I will give are applicable to the

United States, but it is clear that, in the absence of an agreement, the forces of the Soviet Union will also increase rapidly.

This conference began in 1962. In 1963 the inventory of operational vehicles in the United States increased by approximately 200 percent over the 1962 level. In 1964 it is increasing by 550 percent. By 1965 it will have grown to an aggregate increase of 750 percent over the 1962 level. As I indicated a moment ago, we must assume that the Soviet Union is increasing its missiles at a similar rate.

I do not set forth those figures in order to engage in hindsight. It is useless for us to speculate upon what results this conference might have achieved had we concentrated first on measures to hold constant the numbers of strategic nuclear delivery vehicles. It is useless to speculate whether we could have avoided a situation in which both sides substantially increased their strategic nuclear vehicles while arguing how best to reduce them.

It is of no utility for this conference to consider what might have been the effects of something we did not do 2 years ago upon our situation today. It is, however, of the greatest utility for this conference to consider the effect of what we can do today upon our situation 2, 3, and many more years from today. The freeze of the number of strategic nuclear delivery vehicles will have a decisive impact on the program to build more of these armaments—programs which will go forward if no agreement of this type is reached. If this measure were agreed upon and implemented, it would accomplish more practical results during the next several years—in terms of actual inventories of weapons of mass destruction—than any collateral measure put before this conference.

The freeze would keep many hundreds of the deadliest weapons ever devised by man out of the arsenals of the future and would halt all progress on even more deadly ones now being developed. Moreover, as President Johnson has stated, the measure we are now discussing, by preventing the further expansion of the deadly and costly arms race, can open the path to reductions in all types of forces from present levels.

The freeze of strategic nuclear vehicles, particularly in conjunction with the cutoff of production of fissionable materials for use in nuclear weapons, would have a stabilizing effect on the military environment. It would, as I have just pointed out, curb the nuclear arms race. Moreover, it would facilitate progress toward general disarmament, although it is, of course, not linked

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with the conclusion of a treaty on general disarmament. It is our belief, therefore, that the freeze and the cutoff could usefully be explored in parallel as companion measures.

On the instructions of President Johnson, I should now like to present further details concerning the elements of the strategic nuclear vehicle freeze. These details should answer a number of the questions which have been asked in the Committee about this measure. We also hope that they will serve as a stimulus for further exploration of the freeze on strategic nuclear vehicles by the conference.

Under the agreement which the United States proposes to explore, the numbers and characteristics of the following strategic nuclear vehicles would be frozen:

First, ground-based surface-to-surface missiles having a range of 5,000 kilometers or greater, together with their associated launching facilities; and sea-based surface-to-surface missiles having a range of 100 kilometers or greater, together with their associated launchers;

Second, strategic bombers having an empty weight of 40,000 kilograms or greater, together with any associated air-to-surface missiles having a range of 100 kilometers or greater;

Third, ground-based surface-to-surface missiles having a range of between 1,000 kilometers and 5,000 kilometers, together with their associated launching facilities;

Fourth, strategic bombers having an empty weight of between 25,000 kilograms and 40,000 kilograms, together with any associated air-to-surface missiles having a range of 100 kilometers or greater;

Fifth, strategic anti-missile-missile systems, together with their associated launching facilities. In connection with this type of armament, further technical discussions will be required in order to formulate a workable and acceptable definition of "anti-missile-missile systems."

Let me turn now to the limitations on production and testing.

The production of new types of armaments that fall within the listing I have outlined would be prohibited. The production of all existing types of armaments within this listing, and of specified major subassemblies of these armaments, would be halted, except for production required to cover the maintenance of the vehicles, their accidental loss, and the expenditure of

missiles within agreed annual quotas for confidence and training firings.

Replacement would be on a one-for-one basis of the same type. Production for authorized replacements would not be permitted to exceed agreed annual numbers which would, in effect, amount to a small percentage of the inventories of armaments existing in the hands of the respective sides at the effective date of the freeze agreement. Verification of inventories would not be involved. The agreed replacement numbers would be subject to periodic review.

With respect to replacement of armaments no longer in production, the parties would seek to agree upon acceptable substitutes from among weapons in production. In the absence of such an agreement on items out of production the party concerned could reopen production lines for one-for-one replacement.

Control over the number of missile launchers is an essential element of the program. Limitations would also be imposed on the construction and improvement of launchers and launching facilities, commensurate with the spirit of the production limitations.

Production of boosters for use in space programs would be permitted even though such vehicles are equivalent to the boosters used for armaments, but would be limited to the quantity needed to meet the announced use of the boosters for such space programs.

Limitations on testing would be applied under the program. Certain types of tests and firings would, however, be permitted. Confidence and training firings of existing affected missiles would be limited to an agreed annual number for each type of missile, subject to periodic review, as I indicated earlier. Tests of new missiles and aircraft systems would be permitted to continue, subject to verification, as far as required for allowed space and civil air programs and for development of nonstrategic types of weapons not affected by the freeze. Limitation on research and development testing would be the subject of technical discussions.

How would the freeze be verified? As a point of departure, the parties to the agreement would have to make a complete declaration of all production and testing facilities relevant to the agreement. Declarations would be made after the conclusion but before the implementation of the agreement. Included would be facilities producing—or recently utilized in producing—completed armaments and specified major subassemblies of armaments affected by the freeze. Facilities producing, or

recently involved in the production of, vehicles for space or aeronautical programs and their major subassemblies, equivalent to the boosters used for affected armaments, would also be included. All installations used for space launchings and sites to be used for all allowed missile firings would also be declared. Declarations would have to be kept up to date if new facilities were used.

The verification arrangements which we have in mind for the freeze would concentrate on monitoring critical production steps, replacements, and launchings. A verification system sufficient to provide adequate assurance of compliance would of course be required. Such a system could include the following:

(1) continuing inspection of declared facilities;

(2) a specified number of inspections per year to check undeclared locations for possible prohibited activities such as armament production or launching-site construction;

(3) the stationing of observers to verify all space launchings and all allowed missile firings in order that stated requirements for replacement missiles could be verified and the launching of prohibited types of missiles detected;

(4) observation of the destruction of—or, in the case of accidents, other confirmation of—vehicles and launchers being replaced.

Further details of the verification system required will be developed on the basis of further study. It is clear, however, that the verification system for the measure which we are now exploring would be less extensive than that required for general and complete disarmament. It would not involve verification of the levels or the deployment of existing armaments.

To formalize an agreement on the freeze, we would propose embodying it in a treaty which would enter into force within an agreed interval after signature and ratification by the United States, the Soviet Union, and such other states as might be agreed. We believe that such a treaty should contain a withdrawal clause similar to that contained in the partial test ban treaty, with which I know the chairman is familiar. The freeze agreement should also contain a provision that a conference would be held, periodically or at the call of any party, to consider whether the treaty should be continued or modified. It should be further provided that after such a conference any party could consider whether to exercise its right under the withdrawal clause on the basis of the results of the conference.

I have described the essential elements of the United States proposal to explore a verified freeze of nuclear delivery vehicles. We have put forward this concept for serious exploration by the Soviet Union, the United States, and their respective allies. As a result of such continuing exploration, the United States may wish, therefore, to review the outline of the elements of the freeze concept which I have just presented.

The freeze provides a practical means to halt the most costly and potentially destructive segment of the arms race. The suggestion for a freeze deals with the areas of the arms race which are of the greatest danger and with the arms which are most easily controlled. This suggestion is designed to affect those armaments which are the most significant in halting the arms race and which are, at the same time, the simplest to verify in regard to limitations on production and testing.

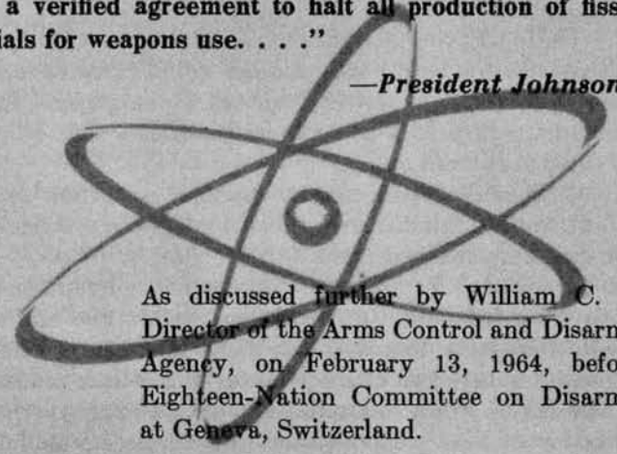
Agreement on this measure, especially if coupled with its companion measure—the cutoff of production of fissionable materials for use in nuclear weapons—would provide an excellent point of departure for major arms reductions to follow. It would slow down what is now an ever-mounting spiral of armaments and by so doing greatly facilitate progress toward disarmament.

We ask all members of this conference to examine with care the measure we have set forth here this morning. We particularly ask the Soviet Union, as one of the states primarily affected by this measure, to give the details careful attention. This is a measure dealing with a complex problem. We hope and expect that governments will look at this measure carefully and thoughtfully before indicating their reaction.

We ask that this Committee explore the freeze in the spirit in which it is proposed. We hope that that will lead to a fruitful exploration of this important measure. With agreement on this measure, we shall have stopped on a plateau from which we could begin the descent from danger.

". . . a verified agreement to halt all production of fissionable materials for weapons use. . . ."

—President Johnson



As discussed further by William C. Foster, Director of the Arms Control and Disarmament Agency, on February 13, 1964, before the Eighteen-Nation Committee on Disarmament at Geneva, Switzerland.

A HALT IN THE PRODUCTION OF FISSIONABLE MATERIALS FOR SUCH USE IN NUCLEAR WEAPONS IS AN IMPORTANT ELEMENT OF STAGE I OF THE UNITED STATES PROPOSAL FOR GENERAL AND COMPLETE DISARMAMENT. The transfer to nonweapon uses of agreed quantities of weapons-grade U–235 by the United States and the Soviet Union is also an important stage-I measure affecting nuclear weapons.

The United States delegation has stated previously to the Committee that the cutoff and transfer could be implemented as collateral measures in advance of agreement on general and complete disarmament. It is as collateral measures that I intend to discuss these proposals today.

We consider the cutoff and the transfer important proposals. The cutoff would limit the amount of fissionable materials available for use in nuclear weapons.

As I indicated earlier, the same philosophy underlies our proposals for a freeze and a cutoff—the points two and three of President Johnson's message to the conference. The freeze would limit numbers and characteristics of strategic nuclear vehicles. The cutoff would limit the amount of explosive materials available for nuclear weapons, and the transfer would actually reduce this amount.

I wish to stress at the outset the flexibility with which the United States delegation would approach negotiations with the Soviet Union regarding the production cutoff and transfer. We are prepared to approach the problems involved in a number of different ways. We are prepared to accept a wide range of alternatives.

Practical steps which would restrict the availability of fissionable materials for use in nuclear weapons appear to us possible. These steps should, we believe, be taken in the immediate future.

I should like now to develop more precisely the United States proposals.

Regarding the cutoff, the United States is willing to agree to

either a complete halt in the production of fissionable materials for use in nuclear weapons or a reciprocal plant-by-plant shutdown. This approach seems to embrace the entire range of possible methods of bringing a cutoff into effect. We are prepared to halt production all at once or over a period of time. We would welcome an indication from the Soviet delegation of the sort of approach which they would find acceptable.

Regarding the transfer, the United States position is similarly flexible. The proposal originally put forward by the United States called for the transfer to nonweapon uses of the same quantity of weapons-grade U–235 by both sides. We have, however, indicated our willingness to consider other ratios whereby the United States would transfer a larger amount than the Soviet Union.

This was reflected in an amendment of the United States treaty outline on 14 August 1963. At that time the United States delegation indicated an example of the kind of arrangement we might agree upon. This might be for the United States to transfer an amount such as 60,000 kilograms if the Soviet Union would agree to transfer 40,000 kilograms. We are still flexible on the question of amounts of weapons-grade U–235 to be removed from availability for nuclear weapons. We would welcome and give serious consideration to any reasonable Soviet counterproposal.

This proposal is not merely a gesture. Some figures illustrate its scope. As examples, the approximate monetary value of 60,000 kilograms of weapons-grade U–235 is $720 million. If completely fissioned in explosions, 60,000 kilograms would release about 1,000 megatons, or one-third of a ton of TNT equivalent for every man, woman, and child on earth. On the other hand, if the 60,000 kilograms were completely converted to electrical energy in nuclear power reactors, it would produce 370 billion kilowatt-hours, or somewhat more than one-third as much as the entire United States production of electrical energy in 1963. These figures give some idea of the dimensions of the United States proposal.

Now I should like to consider some of the possible methods of verifying the cutoff. One of the reasons why the United States delegation believes that this proposal is promising is because the inspection required can be limited in scope.

For example, inspection of existing stockpiles of nuclear weapons would not be necessary.

The extent of inspection initially required would depend

on whether the Soviet Union preferred a complete halt in the production of fissionable materials for weapons or a reciprocal plant-by-plant shutdown.

If a complete production cutoff were agreed upon, the International Atomic Energy Agency might monitor declared facilities for the production of fissionable material.

Those facilities declared to have been shut down would be inspected to make sure that no production of fissionable materials was taking place. Other declared facilities might continue to produce fissionable materials for peaceful purposes. These facilities and the produced materials would be monitored to insure that no such product was diverted to the fabrication of nuclear weapons.

Each side would also need to have assurance that the other was not engaging in clandestine production at undeclared facilities. We believe that inspection to guard against this possibility could be carried out on a reciprocal basis. We also believe that a reciprocal system could be devised that would not be onerous.

If, on the other hand, production were halted on a plant-by-plant basis by the United States and the Soviet Union, inspection would be even more limited at the outset. Only the plant or plants actually shut down would be inspected. The possibilities of International Atomic Energy Agency inspection of a plant-by-plant shutdown appear promising to us also, and we believe they should be carefully explored.

What we are proposing in this regard is a way of moving toward a complete cutoff. We would start with a plant-by-plant shutdown with plant-by-plant inspection. Such inspection could be carried out by the International Atomic Energy Agency. Both the United States and the Soviet Union are members of that international organization.

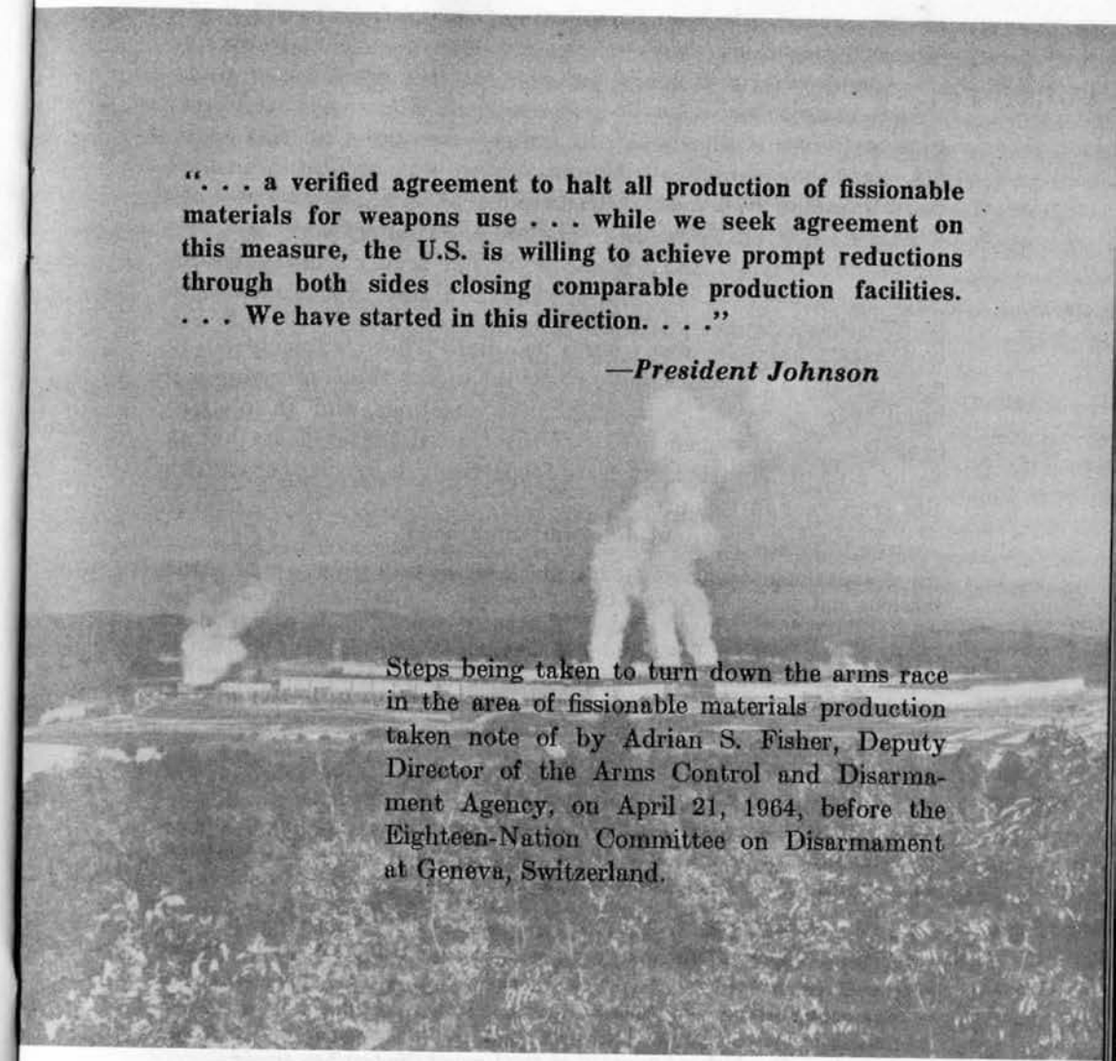
The United States is already cutting back its production of fissionable materials for weapon purposes. We are shutting down 4 out of 14 plutonium-producing reactors. Fourteen is the total number of such producing reactors in the United States. We are cutting back by 25 percent the combined electrical usage of the gaseous diffusion plants producing weapons-grade U–235.

As I have previously announced to this Committee, the United States is prepared to permit international inspection of one of the plutonium reactors being shut down. This is to provide an example and a precedent.

However, there is a limit to the extent to which the United

States can go in this direction alone. We hope for a measure of reciprocity on the part of the Soviet Union. The Soviet Union can decide for itself the size of the step it wishes to take. We should welcome the shutdown of one Soviet plant, a few, or all.

Achievement of some measure of agreement would start both sides in the direction of freezing and reducing the amounts of explosive materials available in the world for nuclear weapons.



". . . a verified agreement to halt all production of fissionable materials for weapons use . . . while we seek agreement on this measure, the U.S. is willing to achieve prompt reductions through both sides closing comparable production facilities. . . . We have started in this direction. . . ."

—President Johnson

Steps being taken to turn down the arms race in the area of fissionable materials production taken note of by Adrian S. Fisher, Deputy Director of the Arms Control and Disarmament Agency, on April 21, 1964, before the Eighteen-Nation Committee on Disarmament at Geneva, Switzerland.

PRESIDENT JOHNSON, IN THE THIRD POINT OF HIS MESSAGE TO THIS CONFERENCE WHEN IT RECONVENED ON 21 JANUARY OF THIS YEAR, MENTIONED NOT ONLY A CUTOFF OF PRODUCTION OF FISSIONABLE MATERIALS FOR WEAPON USE BUT ALSO A CUTBACK IN THE PRODUCTION OF SUCH MATERIALS, AS A POSSIBLE MAJOR CONTRIBUTION TOWARD WORLD PEACE.[1] These subjects—both a cutoff and a cutback—have been put before the conference and have been discussed both at private meetings and in plenary session. Therefore, on behalf of the United States, I am happy to be able to point to concrete steps being taken to turn down the arms race in this area.

Yesterday President Johnson announced:

> I am taking two actions today which reflect both our desire to reduce tensions and our unwillingness to risk weakness. I have ordered a further substantial reduction in our production of enriched uranium, to be carried out over a 4-year period. When added to previous reductions, this will mean an overall decrease in the production of plutonium by 20 percent, and of enriched uranium by 40 percent. By bringing production in line with need . . . we think we will reduce tension while we maintain all the necessary power.
>
> . . . in reaching these decisions, I have been in close consultation with Prime Minister Douglas-Home. Simultaneously with my announcement now, Chairman Khrushchev is releasing a statement in Moscow, at 2 o'clock our time, in which he makes definite commitments to steps toward a more peaceful world. He agrees to discontinue the construction of two big new atomic reactors for the production of plutonium over the next several years, to reduce substantially the production of U–235 for nuclear weapons, and to allocate more fissionable material for peaceful uses.
>
> This is not disarmament. This is not a declaration of peace. But it is a hopeful sign and it is a step forward which we welcome and which we can take in hope that the world may yet, one day, live without the fear of war. At the same time, I have reaffirmed all the safeguards against weakening our nuclear strength which we adopted at the time of the test ban treaty.

This announcement by the United States that it intends to reduce its production of fissionable material by the percentages

[1] The first nuclear cutback step to which President Johnson referred in the third point of his Jan. 21, 1964, message to the conference as a start in the direction of both sides closing comparable production facilities was the reduction by 25 percent of the production of enriched uranium announced on Jan. 8, 1964, in his state of the Union message.

which President Johnson has indicated, and the announcement by Chairman Khrushchev of measures which the Soviet Union is taking in the same direction, are important in several ways.

First, they mark the beginning of what the United States hopes will be a process leading ultimately to a complete and verified cutoff in the production of fissionable materials for weapon purposes and to substantial transfers to peaceful uses.

Second, they demonstrate the validity of the view, which I know is generally held at this conference, that with patience and persistence in our search for ways to halt and turn down the arms race it is possible to take concrete steps to reach this goal. The idea of a cutback as a preliminary step to a possible cutoff was mentioned to this conference in President Johnson's message of 21 January. It was discussed in this conference, both privately and in plenary session, during February. The announcements by President Johnson and Chairman Khrushchev came on 20 April, 13 weeks after the matter was first raised here.

Third, these steps prove again that work done by governments in connection with the work of this conference can be of the utmost importance in the search for peace.

In assessing the work of this conference we must bear in mind that peace, as President Johnson has pointed out, will not come suddenly. It will not emerge dramatically from a single agreement or a single meeting. It will be advanced by concrete and limited accommodations, by the gradual growth of common interest, by increasing awareness of shifting dangers and alinements, and by the development of trust in a good faith securely based on a reasoned view of the world.

One step in the direction of peace was taken yesterday. The United States is hopeful that we can take further steps.[2]

[2] In a press conference on Apr. 23, 1964, President Johnson discussed this second nuclear cutback step in these words:

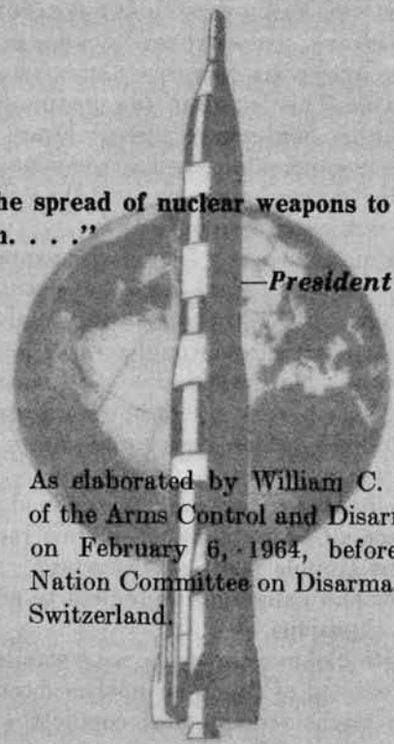
"I am glad to report that our decision to cut back on the production of unneeded nuclear materials and the parallel announcements of Chairman Khrushchev and Prime Minister Douglas-Home have been warmly greeted throughout the world and also by responsible opinion in this country.

"We have made it very clear that these announcements do not constitute a new international agreement or contract of any sort. We reached the decision here in the United States on our own initiative as what we, in the United States, ought to do. We did it in a prudent and reasonable concern for our strength and for avoiding excess, and we then explained our intention to the United Kingdom and to the Soviet Government. They, in turn, acting on their own responsibility, announced parallel decisions.

"This is a policy of restraint by mutual example."

". . . to stop the spread of nuclear weapons to nations not now controlling them. . . ."

—President Johnson



As elaborated by William C. Foster, Director of the Arms Control and Disarmament Agency, on February 6, 1964, before the Eighteen-Nation Committee on Disarmament at Geneva, Switzerland.

THE SPREAD OF NUCLEAR WEAPONS AND WEAPON TECHNOLOGY TO NONNUCLEAR NATIONS CONSTITUTES A GRAVE THREAT TO THE SECURITY AND PEACE OF ALL NATIONS, LARGE AND SMALL, NUCLEAR AND NONNUCLEAR. This is one of the postulates upon which all participants in this conference agree. Every increase in the number of nations controlling nuclear weapons will multiply the possibilities of nuclear confrontations and the risks of accidental or intentional use of nuclear weapons.

Nonnuclear nations have frequently expressed the fear of being caught in the crossfire of a nuclear exchange between the two nuclear sides. Certainly the deadly fallout which would result from such an exchange would not be confined within any particular set of national boundaries. But I think it is equally true that the security of nonnuclear powers among themselves will be decreased by the wider dissemination of national nuclear weapon capabilities.

Arms races, unfortunately, are not confined to large industrial nations. We are all aware that local arms races are being run today in various trouble spots of the world. Nuclear weapons would add a new and dangerous ingredient to any of these potentially explosive situations.

The acquisition of nuclear weapons by smaller countries would increase the likelihood of the great powers' becoming involved in what otherwise might remain local conflicts. This danger was recognized by Chairman Khrushchev in his note regarding peaceful settlement of territorial disputes.

Finally, nuclear aspirations are costly to realize. Countries in need of economic development should not slow down or halt programs designed to raise the standards of living of all their people in order to seek the dubious distinction of membership in the nuclear club.

It should be clear to us all, therefore, that steps to inhibit or prevent the proliferation of national nuclear weapon capabilities are a common interest of us all. This is the point I wish to stress.

It is a conclusion to which both moral sense and national self-interest lead us. The interests of both nuclear sides overlap in this area. Here also the interests of the nonnuclear powers overlap with one another and with those of the existing nuclear powers.

Since the dawn of the nuclear age, United States policy has been firmly fixed against the spread of national nuclear weapon capabilities. As you all know, it was the United States which in 1946 presented to the United Nations a plan to bring atomic energy activities under international control and to eliminate all atomic weapons from national arsenals. Furthermore, existing domestic legislation in the United States prohibits the transfer of nuclear weapons to any nation that has not already developed such weapons, and atomic energy assistance of any kind to other countries is subjected to stringent control.

It is United States policy to further the development of peaceful uses of atomic energy. President Eisenhower, in his "Atoms for Peace" address to the United Nations in 1953, charted our course in this regard. The United States subsequently gave its strong support to the establishment of the International Atomic Energy Agency.

However, ever since the first controlled nuclear reaction, the world has been plagued by a peculiar fact of nature. Almost any peaceful use of nuclear energy results in the creation of plutonium, an element which can be used to make the most destructive weapons mankind has ever known. Therefore, any nuclear power plant is a potential source of the raw material for atomic explosives.

For this reason it has long been the policy of the United States Government to support the application of international controls to the transfer of nuclear materials, equipment, or information between states for peaceful uses, as a safeguard against proliferation of nuclear weapon capabilities. The United States has, in this regard, given strong support to the development of a system of safeguards by the International Atomic Energy Agency. We are pleased to note that the Soviet Union has recently lent its support to the extension of this system of international safeguards to large reactor facilities.

Finally, in this review of United States policy with regard to nondissemination of nuclear weapons, it should be noted that my Government voted in favor of the Irish resolution (A/RES 1665 (XIV)) unanimously adopted by the 16th session of the

General Assembly. You will recall that that resolution calls upon all states, and in particular upon the states at present possessing nuclear weapons, to use their best endeavors to secure the conclusion of an international agreement under which nuclear states would undertake to refrain from relinquishing control of nuclear weapons to states not possessing such weapons. The agreement called for by the Irish resolution would also contain provisions under which states not possessing nuclear weapons would undertake not to manufacture or otherwise acquire control of such weapons.

The United States has long sought an agreement which would implement the terms of the Irish resolution.

We wish to make it clear that the creation of multilateral defense forces within the framework of existing collective security arrangements would not result in additional states' obtaining national control of nuclear weapons. The creation of such forces would be fully consistent with the Irish resolution and would, in fact, reinforce common policies to prevent wider dissemination of national nuclear weapon capabilities.

What practical steps can be taken to contain the threat to the security of all nations which the potential spread of national nuclear weapon capabilities presents? Inability to reach agreement on a complete solution of international problems is no excuse for failure to take whatever steps are possible toward a partial solution.

There are constructive steps which we believe the nuclear states can take toward the objective of preventing the dissemination of national nuclear weapon capabilities; and there are steps which nonnuclear states can take in the same field that will increase their own security in the nuclear age.

The United States proposes the following actions:

First: The United States will, in private discussions, seek agreement with the Soviet Union on the terms of a declaration based on the Irish resolution. That would contain undertakings regarding nondissemination and nonacquisition of nuclear weapons. Such a declaration should, we believe, be subject to accession by both nuclear and nonnuclear powers.

As an immediate step, to facilitate progress in these discussions, the United States, for its part, does not intend to take any actions inconsistent with the terms of the Irish resolution. That is the declared policy of the United States.

Second: The United States proposes an exploration of the

possibilities of agreement on the application of effective safeguards to transfers of fissionable materials, equipment, or information, for peaceful purposes. We believe that safeguards of this kind would minimize the possibilities of the development of additional nuclear weapon capabilities under national control as a result of such transfers. The kind of agreement we wish to consider would provide that transfers for peaceful purposes would take place only under International Atomic Energy Agency safeguards or similar arrangements.

Third: The United States reaffirms, as a contribution to the objective of restricting dissemination of nuclear weapons, its proposal for a verified halt in the production of fissionable materials for use in nuclear weapons, and, in association with such a halt, the United States also reaffirms its proposal for the transfer by the United States and the Soviet Union of agreed quantities of weapons-grade U–235 to nonweapons uses.

If such a production cutoff can be agreed as a separate measure, prior to agreement on stage I of general and complete disarmament and establishment of an international disarmament organization, the possibility of verification by the International Atomic Energy Agency should be explored. For example, the International Atomic Energy Agency might verify the halt in production of fissionable materials for use in weapons at existing production facilities. That might be done on a temporary or permanent basis as agreed in consultation with that organization. Inspection to provide assurance that fissionable materials for weapon use were not produced at clandestine facilities could be conducted on a reciprocal basis pending establishment of the international disarmament organization.

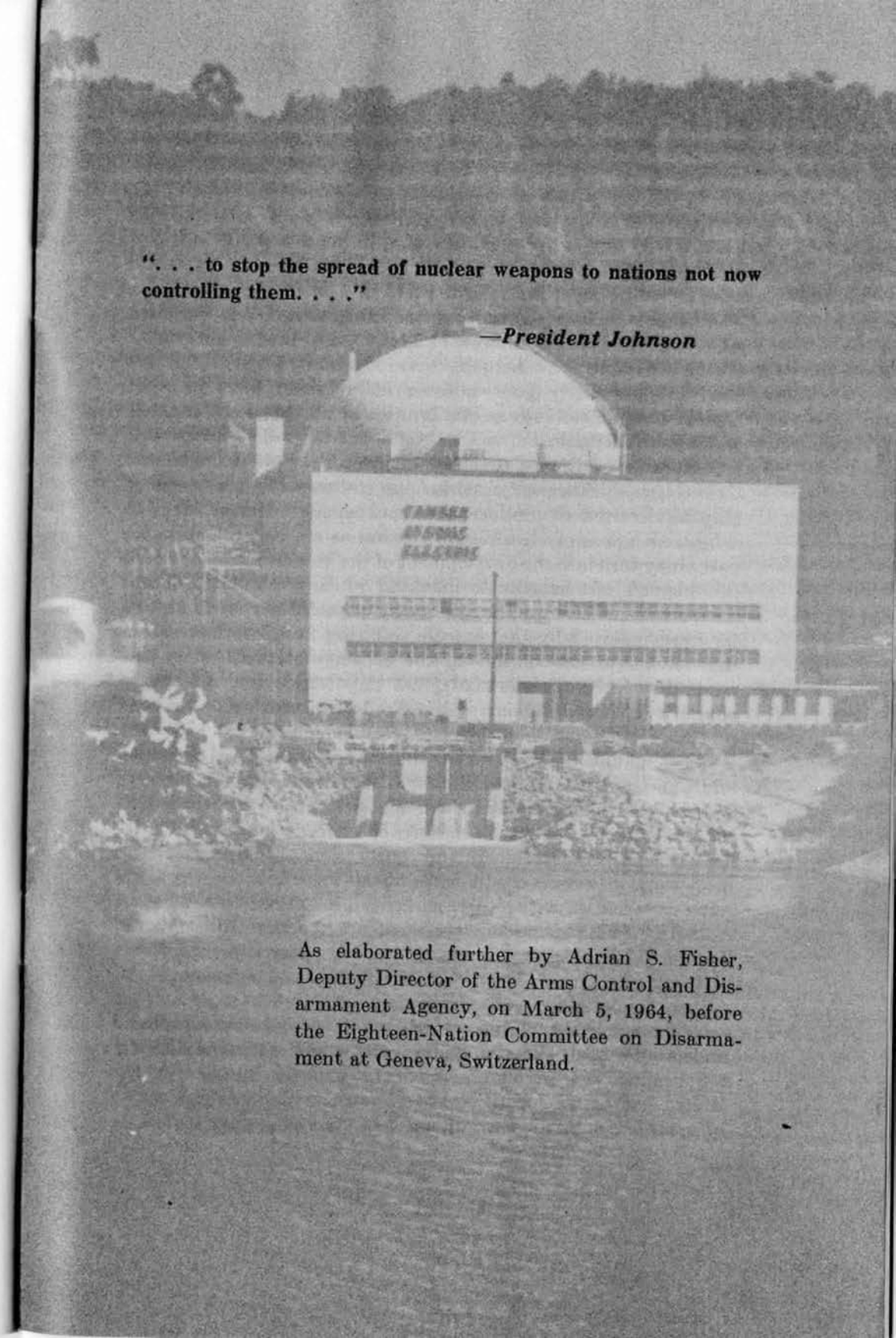
Fourth: We have already stated that the United States intends to reduce its production of fissionable materials for use in nuclear weapons. President Johnson has announced that the United States is shutting down four plutonium reactors and cutting back production of U–235. This should provide a good opportunity for the Soviet Union to follow the principle of mutual example. We urge the Soviet Union to make a similar reduction of its production facilities. We are prepared to agree with the Soviet Union to the plant-by-plant shutdown of additional nuclear production facilities on a verified and reciprocal basis.

Fifth: The United States is prepared to permit international inspection of one of the weapon material production reactors scheduled to be shut down in our country. Possibly this could be

done by the International Atomic Energy Agency. This offer by the United States is intended to provide an example and a precedent. We hope that the Sovier Union will reciprocate, but the offer stands whether or not it is reciprocated.

If the Soviet Union agrees to corresponding verified reactor shutdowns, the United States offer to accept international inspection will be extended as other reactors are shut down.

Containment of the nuclear threat is an interest shared by all nations, large and small, nuclear and nonnuclear, industrial and developing. The limited nuclear test ban treaty was a first step in that direction. As I have indicated, there is a variety of further practical and possible steps to contain the wider dissemination of national nuclear capabilities. Those steps would logically follow upon the nuclear test ban.



". . . to stop the spread of nuclear weapons to nations not now controlling them. . . ."

—President Johnson

As elaborated further by Adrian S. Fisher, Deputy Director of the Arms Control and Disarmament Agency, on March 5, 1964, before the Eighteen-Nation Committee on Disarmament at Geneva, Switzerland.

AT PRESENT ONLY A FEW COUNTRIES CAN PRODUCE NUCLEAR WEAPONS. It is in the interest of all the world that their number not be increased.

An increasingly large number of countries have peaceful nuclear programs. It is in the interest of all that their number continue to increase.

However, without effective safeguards, the materials and technology which are acquired for peaceful uses of nuclear energy may be diverted to produce nuclear weapons. Unless effective safeguards are applied, what started out as a use of the atom for peace may turn into the development of the atom for war. Should this happen, the benefits to mankind which we hope to obtain by the wide uses of nuclear energy for peaceful purposes may be far overshadowed by the dangers resulting from the increase in the number of nations having the capacity to produce nuclear weapons. It is, therefore, of great importance that we create effective safeguards against this. To do so is not easy, but it is possible.

I should like, first, to review the major international activities and policies of the United States in the field of atomic energy. Against that background, I shall then develop further those two proposals in the President's message for international safeguards.

A series of agreements for cooperation provides the basic framework within which the United States participates in peaceful nuclear activities with other countries and international organizations. These include agreements with the International Atomic Energy Agency and with various regional organizations active in the field. They also include bilateral agreements for cooperation with some 35 countries.

The nuclear materials which we have distributed abroad under agreements for cooperation are valued at approximately $82.5 million. Reactors and critical assemblies supplied by the United States are located in 24 countries. Each is subject to safeguards to insure against diversion of the materials or equipment

to military uses. The system of safeguards applied bilaterally by the United States Government is administered by the United States Atomic Energy Commission.

The United States has also given its strong support to the development of an effective system of international safeguards by the International Atomic Energy Agency. The United States bilateral system is fully consistent with that IAEA system.

In recent years the IAEA has made significant progress toward the development of a comprehensive system of international safeguards. Agency safeguards for small reactors of less than 100,000 thermal kilowatts were adopted on 31 January 1961. Final action extending the system to large reactors of 100,000 thermal kilowatts or more was taken on 26 February 1964. That final decision of the Board of Governors of the IAEA was unanimous. In particular we welcome the cooperation of the Soviet Union in extending the Agency safeguards system.

We hope that in the future the IAEA will extend further its system of safeguards to cover fuel fabrication and chemical reprocessing facilities.

It is the policy of the United States to transfer the administration of safeguards under its existing bilateral agreements to the IAEA as rapidly as possible. In pursuance of this policy, the United States and Japan, for instance, have recently transferred to the IAEA responsibility for administering safeguards under their existing agreement for cooperation. The United States is currently negotiating additional transfers with a number of its other bilateral partners.

Some 2 years ago, the IAEA was also invited by the United States to apply Agency safeguards to several of its own smaller research and power reactors. Three reactors in the United States are at present being inspected by the IAEA. Two are research reactors located at Brookhaven, New York; the third is a 45,500-thermal-kilowatt power reactor located in Ohio. The opening of these facilities to IAEA inspection has, we believe, been a step in developing the principle of safeguarding the peaceful uses of atomic energy. It has also assisted the IAEA in gaining practical experience in field-testing inspection techniques.

The United States does not believe that the opening of these reactors to international inspection is a derogation of its national sovereignty. Nor is the safeguard system onerous. It involves recordkeeping, reporting, and inspection—the same kind of controls as prudent management would naturally set up internally.

For the purposes of a safeguard system, such controls must be checked and inspected by an external agency.

For the necessary external check, we prefer international to bilateral safeguards. There is little reason for any country to doubt the objectivity of inspections conducted by an international inspectorate in which nationals of a variety of countries participate.

I should now like to develop further the United States proposals regarding international safeguards on peaceful nuclear activities.

First, the United States proposes that all future transfers of nuclear materials for peaceful purposes take place under effective international safeguards. We believe that this proposal could be implemented by appropriate agreements, which would grow out of this conference, covering all such future transfers. Fissionable materials or raw materials or equipment essential to the production of fissionable materials would be covered. Suppliers would agree to transfer materials and equipment only under IAEA safeguards or similar arrangements. Recipients would agree to receive materials or equipment only under such safeguarded arrangements. Provisions relating to open technology and authorized visits by scientists for study and observation might also be included.

We believe that the agreement regarding transfers should, in addition, provide for the extension of IAEA or similar safeguards to an increasing number of the peaceful-use facilities of all states receiving assistance.

Second, the United States proposes that the major nuclear powers accept in an increasing number of their own peaceful nuclear activities the same inspection as recommended for other states.

As a first step in that direction, the United States has already accepted IAEA safeguards on certain of its peaceful-use facilities, as I have described previously.

As a second step, the United States will invite the IAEA to apply safeguards to a large power reactor in the United States. The Yankee power reactor at Rowe, Massachusetts, has been selected for this purpose. This privately owned reactor, which is rated at a power level of 600,000 thermal kilowatts, is one of the largest nuclear power reactors in operation in the United States. In 1963 it produced over 1 billion electrical kilowatt hours.

We are offering the Yankee reactor for IAEA inspection for

two reasons. First, it will assist the IAEA further in developing and demonstrating the effectiveness of its inspection techniques for large reactor facilities. Second, we intend it as an example to other nuclear powers. We hope that other states will join us in this step and invite the application of IAEA safeguards on some of their large civil reactors; indeed, we urge them, and in particular we urge the Soviet Union, to do so.

Progress toward development of an effective system of international safeguards for peaceful nuclear activities is an important objective in itself. Therefore the United States will invite IAEA inspection of the Yankee reactor whether or not other states reciprocate. But, as I have said, we urge the Soviet Union in particular to reciprocate. If it should do so, we could then discuss the possibility that we might both place additional peaceful atomic energy installations under IAEA safeguards.

Some members of the Committee may wonder about the significance of these proposals as regards a slowing down of the arms race. Today I have talked about IAEA safeguards, not general and complete disarmament. I have talked of inspection of peaceful nuclear reactors instead of the destruction of armaments. Yet I believe that the proposals which the United States has put forward this morning could, if acted upon, produce one of the most significant developments of this conference.

In the future, atomic energy will become an increasingly important resource for fulfilling man's daily needs. As that happens, transfers of nuclear materials between states for peaceful purposes will increase both in frequency and in size. Participation in atomic energy research and civil power programs will become more and more widespread.

It is of the utmost importance, therefore, to take the steps which will insure that these peaceful atomic energy activities are not diverted to military purposes. It is essential to build up the international safeguards which will keep that from happening.

If we do not, we shall find that in extending the benefits of nuclear energy for peaceful purposes we have not sown a field with choice seed which will ripen into a field of grain for the benefit of all mankind. We may find instead that we have sown the field with dragons' teeth and, when harvest comes, it will bristle with nuclear weapons. What the United States proposes are practical steps to keep that from happening.

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LEGISLATIVE REFERENCE SERVICE

BUDGET ACCOUNTS OF SELECTED COUNTRIES AS SHOWN BY THE UNITED NATIONS STATISTICAL YEARBOOK 1961

By

Elden E. Billings
Analyst in International Finance
Economics Division
September 16, 1963

NOTE: The letters PR indicate provisional results, the letters RE indicate revised estimates, the letter E means voted estimates, and the letters DE mean draft estimates submitted to Parliament. Otherwise the figures relate to the closed accounts.

ARGENTINA

Fiscal Year Ending October 31, 1960

(millions of pesos) E

	Amount	Percentage of Budget
Total	98,337.0	100.0
Defense	17,217.3	17.6
Education	8,397.6	8.5
Health	2,240.3	2.3
Social Security, etc.	226.6	0.2
Public Works	17,650.7	17.9

BELGIUM

Calendar Year 1961

(millions of francs) E

Total	131,340	100.0
Education	26,584	20.2
Public Health	2,145	1.6
Other Social Services	22,227	16.9
National Defense	16,745	12.7

BRAZIL

Calendar Year 1961 E

(millions of cruzeiros)

Total	302,106.6	100.0
Defense	59,475.9	19.7
Education and Health	41,798.3	13.8

CANADA

Fiscal Year Ending March 31, 1962

E

(millions of Canadian dollars)

	Amount	Percentage of Budget
Total	6,224.2	100.0
Defense	1,642.7	26.4
Health and Hospital Care	270.0	4.3
Social Service Benefits	675.1	10.8
Veterans Benefits	322.1	5.2
Public Works	222.0	3.6

CZECHOSLOVAKIA

Calendar Year 1961

E

(million korunas)

Total	111.9	100.0
Defense	9.5	8.5
Social Welfare	42.4	37.9
National Economy	57.2	51.1

DENMARK

Fiscal Year Ending March 31, 1962

E

(million kroner)

Total	8,350	100.0
Defense	1,275	15.3
Education	1,220	14.6
Public Health	840	10.1
Other Social Services	1,640	19.6

FINLAND

Calendar Year 1962

DE

(billion markkaa)

	Amount	Percentage of Budget
Total	444.4	100.0
Defense	32.6	7.3
Education	77.9	17.5
Public Health	28.3	6.4
Social Welfare	86.7	19.5

FRANCE

Calendar Year 1960

FR

(billion francs)

Total	57.4	100.0
National Defense	15.9	27.7
Current transfers to Households	3.5	6.1
Gross Capital Formation	1.9	3.3
Capital Transfers to:		
Other Public Authorities	7.0	12.2
Other Domestic Sectors	4.5	7.8
Abroad	0.5	0.9

GERMANY, FEDERAL REPUBLIC

Calendar Year 1961

E

(million DM)

Total	48,149	100.0
Defense	11,738	24.4
Social Security	14,163	29.4
Housing Construction	1,875	3.9
Loans from Development Bonds	1,500	3.1

GREECE

Calendar Year 1962

E

(million drachmas)

	Amount	Percentage of Budget
Total	22,800	100.0
National Defense	4,950	21.7
Grants and Shared Taxes to Local Authorities	510	2.2
Civil Government Capital Outlay	5,190	22.8
Grants and Loans for Capital Outlay	810	3.6

INDIA

Fiscal Year Ending March 31, 1962

DE

(million rupees)

Central Government

Total	21,231	100.0
Defense	3,149	14.8
Grants to States	1,987	9.4

State Governments

Total	14,944.9	100.0
Education	2,194.5	14.7
Health	929.5	6.2
Multipurpose River Valley Irrigation Schemes	1,368.1	9.2
Electricity Schemes	274.7	1.8
Industrial Development	331.5	2.2
Buildings and Roads	1,200.4	8.0
Other	1,029.3	6.9

INDONESIA

Calendar Year 1959

PR

(million rupiah)

Total	44,350.4	100.0
Defense	14,071.1	31.7
Education	2,018.2	4.6
Health	739.2	1.7
Other Social Services	366.8	0.8
Economic Services	1,926.9	4.3
Communications, Public Works and Energy	1,943.3	4.4

IRAN

Fiscal Year Ending March 20, 1961 E

(million rials)

	Amount	Percentage of Budget
Total	61,208	100.0
Defense	17,121	28.0
Capital Expenditures:		
Capital Outlay of Plan Organization	15,092	24.7
Other Direct Capital Outlay	2,296	3.8
Grants for Capital Purposes	1,732	2.8
Loans for Capital Purposes	2,014	3.3

IRAQ

Fiscal Year Ending March 31, 1961 E

(millions of Irakien dinars)

Total	116.15	100.0
Defense	36.53	31.5
Education	19.00	16.4
Health	6.52	5.6

IRELAND

Fiscal Year Ending March 31, 1959

(£ million)

No defense expenditures 60-61.

Total	150.79	100.0
Defense	8.29	5.5
Education	16.95	11.2
Health	9.98	6.6
Housing	8.02	5.3
Social Welfare	33.28	22.1

ISRAEL

March 31, 1961 (Million Israeli pounds) E

	Amount	Percentage of Budget
Total	1,741.6	100.0
National Defense	300.0	17.2
Education	141.1	6.6
Public Health	59.9	3.4
Social Welfare	138.7	8.0

ITALY

June 30, 1961 E

(Billion lira)

Total	3,944.1	100.0
Defense	600.2	15.2
Education	555.7	14.1
Social Welfare	535.6	13.6

JAPAN

March 31, 1962 E

(Million yen)

Total	2,058	100.0
Defense	209	10.2
Education	247	12.0
Public Health	42	2.0
Other Social Services	387	18.8
Public Works	406	19.7

KOREA

Calendar Year 1962 E

(Billion Hwan)

Total	626.0	100.0
Defense	168.6	29.6
Education	74.9	12.0
Health	6.1	1.0
Social Security, etc.	34.6	5.5
Economic services	200.2	32.0

NETHERLANDS

Calendar Year 1962 DE

(Million guilders)

	Amount	Percentage of Budget
Total	10,351	100.0
Defense	2,061	19.9
Education	2,373	22.9
Public Health	89	0.9
Other Social Services	1,083	10.5

NORWAY

1962 Calenday Year DE

(Million kroner)

Total	7,875.3	100.0
Defense	1,167.9	14.8
Education	820.1	10.4
Public Health	184.7	2.3
Other Social Services	585.0	7.4

PAKISTAN (Central Govt.)

June 30, 1962 (Million rupees) DE

Central Government

Total	4,326.3	100.0
Defense	967.1	(22.4)
Education and Health	46.3	(1.1)
Capital Expenditure	1,109.5	(25.6)

State Governments DE

Total	2,283.1	100.0
Education	222.8	9.8
Health	62.5	2.7
Capital expenditure	537.6	23.5

PHILIPPINES

June 30, 1962 (Million pesos) DE

Total	1,473.7	100.0
Defense	194.5	13.2
Education	404.7	27.5
Other social services	117.4	8.0
Agriculture and natural resources	128.1	8.7
Transportation & Communication	238.3	16.2
Other Economic Services	88.1	6.0

PORTUGAL

Calendar Year 1959 (Million Escudos)

	Amount	Percentage of Budget
Total	9,315.2	100.0
Defense	2,000.3	21.5
Education	900.8	9.7
Public health	548.1	5.9
Social Security and public assistance	731.2	7.8

SPAIN

Calendar Year 1959 (Million Pesatas) E

Total	68,959.9	100.0
Defense	13,616.3	19.7
Education	6,104.8	8.9
Pensions	3,003.9	4.4
Public Works	8,723.6	12.7

SWEDEN

June 30, 1962 E

(Million Kronor)

Total	18,185	100.0
Defense	3,286	(18.1)
Education	2,173	(11.9)
Public health	672	(3.7)
Social Security	4,264	(23.4)
Housing	1,175	(6.5)
Public Roads	1,072	(5.9)

SWITZERLAND

Calendar Year 1961 E (Million francs)

Total	3,058.4	100.0
Defense	1,133.8	(37.1)
Social Security, etc.	269.9	(8.8)
Education	116.9	(3.8)
Public Health	11.5	(0.4)

TURKEY

Feb. 28, 1962$_E$(Million Turkish Liras)

	Amount	Percentage of Budget
Total	8,678.7	100.0
Defense	2,113.9	(24.4)
Education	1,298.4	(15.0)
Health	393.0	(4.5)
Public Works	435.8	(5.0)

UNITED KINGDOM

Calenday Year 1960(£ Million)

Total	8,347	100.0
Defense	1,627	19.5
Education & Child Care	1,069	12.8
Health Service	854	10.4
Housing	393	4.7
National insurance, pensions and assistance	1,522	18.2

13th PUGWASH CONFERENCE ON SCIENCE AND WORLD AFFAIRS

Karlovy-Vary - 13th - 19th September 1964

STATEMENT BY THE PUGWASH CONTINUING COMMITTEE

The 13th Pugwash Conference has now concluded. It was attended by 86 scientists and scholars from 19 countries. Our discussions have been frank and co-operative. They have been chiefly concerned with disarmament and related questions, but they have also dealt with matters such as the responsibility of scientists in the modern world. Our confidence in the value of the Pugwash Conferences has been further strengthened.

The discussions have distinguished a great many wasy in which prompt action could attain and then consolidate an improvement in the international situation, both military and political. They have also identified some of the more distant targets at which it seems reasonable to aim, and some of the problems raised by the development of science and technology.

This statement has been drawn up by the Continuing Committee on the basis of the reports submitted by the Working Groups to the Conference as a whole.

IMMEDIATE STEPS TOWARD DISARMAMENT

Several means of relaxing the present tensions, of reducing the danger of war, and of paving the way to more lasting agreements, have been identified:

1. It would be valuable if the nations concerned with the German problem, and in particular the former occupying powers together with the Federal German Republic, would promptly recognize and guarantee the existing frontiers of Germany with its neighboring states.
2. A non-agression treaty between the North Atlantic and the Warsaw Treaty Organizations would be most valuable. The treaty would require that under no circumstances would the armed forces of one country violate the frontiers of another, or of West Berlin, or the accesses to that city. Access to Berlin shall not be interrupted pending a final agreement upon the complex of problems embracing Berlin and Germany.
3. The idea of a nuclear freeze in Central Europe, applying to an area on each side of the demarcation line in Central Europe, deserves urgent consideration. It would help in the reduction and elimination of nuclear weapons in Europe.

4. Governments concerned with the establishment of the NATO multilateral force should forthwith abandon it. This project adds nothing to military security. It increases political tensions and the danger of the proliferation of nuclear weapons.

5. To avoid nuclear proliferation, a number of interrelated measures are desirable:

   (a) International agreements committing the nuclear powers not to give, and the non-nuclear nations not to accept, nuclear weapons, materials for nuclear weapons, or aid in their development would contribute substantially to the safety of the world.

   (b) Governments should seek means to prevent their nationals from assisting other nations in the development of nuclear weapons and other weapons of mass destruction.

   (c) Procedures should be universally adopted for international control of the movement of fissile materials for peaceful purposes from one country to another.

   (d) The partial test ban treaty should promptly be extended to cover underground testing, if necessary by a moratorium, pending the final agreement. Technical problems of control should not now be an obstacle. It is very important that ways and means be found to convince the governments and the peoples concerned of the inadvisability of any further atmospheric testing.

   (e) A cut-off of further production of fissile materials for weapons use, with a treaty stipulating verification procedures would also be most desirable.

FURTHER STEPS TOWARDS DISARMAMENT

The steps outlined in the preceding section could be implemented in the near future. Other measures which may need more time include:

1. There are a number of regions in which it would be possible to ban the presence of nuclear weapons. Scandinavia, the Balkans, Africa, Latin America, the Middle East, and the South and East of Asia together with Australia, are all potential nuclear free zones.

2. In Central Europe there is a strong case for seeking to reduce the risk of surprise attack by the establishment of demilitarized strips on either side of the line dividing the armed forces of NATO and the Warsaw Treaty Organization. There would have to be accompanying agreements on means of detecting violations and on the strengths and characteristics of border police.

3. The current proposals for the elimination or substantial reduction of strategic bomber forces are promising and should be further explored. It was urged that any resources freed by such measures should be balanced by comparable allocations of resources to specified peaceful uses.

4. A study group is to be set up to examine the requirements for an inspection scheme for biological weapons. For trial purposes the inspection scheme will be limited to a small group of Central European countries representative of Eastern, Western, and non-aligned nations.

COLLECTIVE SECURITY

It is plain that measures will have to be taken to increase the effectiveness of the existing peace-keeping machinery of the U.N. In discussing military measures by the U.N. it was stressed that these were a method of last resort. The U.N. has not yet employed enforcement action under Chapter 7 of the Charter, which requires agreements with member states about the provision of military contingents, and depends on the approval of the Great Powers. In this respect we welcome the memorandum of the U.S.S.R. Government of 10 July 1964 which endorses the implementation of this type of peace-keeping machinery.

There should not for the present be a standing U.N. military force, but instead there should be specially trained contingents in various countries. There should be in addition stand-by police units. Both these would be specially trained to handle the type of situation which the U.N. has frequently faced. It was also thought that wider use of U.N. observers would be helpful.

The possibility of enforcement action by the U.N. is of special importance for the non-aligned nations. It may be an advantage for them to conclude the relevant agreements ahead of other nations. They could thus provide the U.N. with the means to protect non-aligned nations, given the good will of the Great Powers.

The possibility was considered that, instead of financing each peace-keeping operation ad hoc, the U.N. might be provided for this purpose with a steady source of income. Several ideas for raising such an income were suggested, such as a levy on member states according to their military budgets, a royalty on mining rights under the high seas, a tax on the use of communications satellites, or even a small tariff on international trade. These and other ideas need further study.

Besides the idea of prohibiting the use of force in the settlement of territorial disputes, which was proposed in the message from Prime Minister Khrushchev of 31 December 1963, and the reply by President Johnson of 20 January 1964, we consider that the cause of collective security would be well served by a more comprehensive agreement or declaration that would ban the use of force by any nation in violation of the territorial integrity of another. This should exclude neither self-defense, nor collective action under the provisions of the U.N. Charter. The right of self-determination in internal affairs is in no way prejudiced by such a ban.

In the context of the U.N. resolution for ending colonialism, it is now appropriate for the U.N. to take measures to implement it.

A study of the security problems of a disarmed world is urgent because, without confidence in the stability of such a world, and in the security of the sovereign states in it, fear of the future would remain an obstacle to disarmament. In the long run, a peaceful world will require the solution of such issues as racial inequalities and economic disparities between nations and peoples.

In the changed circumstances of a disarmed world one will require within the framework of the U.N. new or changed institutions, for example permanent machinery for continuous verification of the fact of disarmament.

THE RESPONSIBILITIES OF SCIENTISTS

Though disarmament has been the chief concern of the Pugwash Conferences, it has always been recognized that there is a mutual influence between disarmament and international co-operation. Disarmament can permit the scope of international co-operation to be enormously enlarged, and in its turn international co-operation can increase confidence between nations and thus facilitate disarmament. Consideration has, therefore, been given to a number of measures which would strengthen the international ties between scientists and promote concrete measures of international co-operation in several fields. They include:

1. Steps to strengthen international exchanges between scientists. At present the participation of scientists at international conferences is often frustrated by passport or visa difficulties which may prevent them from leaving their own or entering another country. Particular difficulties arise from the operation of the allied travel office in Berlin which issues the travel documents needed by the scientists of the G.D.R. for travel to NATO countries. All such restrictions should be removed.

2. The scope of international exchange arrangements permitting the flow of scientists between countries to work in research centers abroad should be greatly increased. This could be done both through the official exchange program and by an increase in the traditional method of individual invitation.

3. The World Health Research Centre, now under discussion for the study of important medical problems met on a world scale, should be established without further delay. It would promote the study on an adequate scale of urgent problems such as the toxic effects of drugs and various environmental pollutants, epidemiological patterns and methods of analysis of information and data on health research.

4. Steps should be taken to develop a co-ordinated and unified system of scientific information storage and retrieval. New methods based on modern computer techniques are essential. At the moment in many disciplines new publications accumulate so fast that scientists are not made rapidly aware of much of the published information bearing

on their work and there is a resultant duplication of effort in research. The latter is urgent because different systems are being established in different disciplines and countries which are not compatible with one another, like the different system of weights and measures. It is to be emphasized that such a co-ordinated world-wide system would require the active participation of scientists on a great scale. Appropriate studies should be initiated without delay under the auspices of U.N.E.S.C.O. or I.C.S.U.

5. The remarkable progress already made in international scientific co-operation in several areas of research, including space research, was reviewed. Such co-operation is warmly recommended as well as the participation in the International Biological Programme which has just started under the auspices of I.C.S.U.

6. The proposal by the Swedish Government to establish and support an Institute for research on the problems of peace was warmly applauded.

CONFIDENTIAL

13th Pugwash Conference on Science and World Affairs

Karlovy Vary, 13th - 19th September, 1964

REPORT OF WORKING GROUP 1

MEASURES FOR REDUCING TENSIONS AND THE DANGERS OF WAR, ESPECIALLY IN CENTRAL EUROPE

Central Europe is still a principal focus of international tension. In our discussions we have sought measures, political and technical, that would reduce tension and lessen the danger of war. We have concluded that some of the steps which could be taken are immediately practicable and urgently necessary. Other steps also promise great benefits, but require more elaborate preparations, political and technical. We have also been able to single out for discussion some of the major political problems whose solution must be a preliminary to lasting peace in Central Europe; these are matters which call for continued discussion between governments and in groups such as ours.

A. Immediate Steps

1. The prompt conclusion of a non-aggression treaty between N.A.T.O. and the Warsaw Treaty Organization is desirable. We reaffirm the conviction of the 11th Pugwash Conference that such a pact would lead to a further improvement of relations between all the states concerned. The treaty would require that under no circumstances would the armed forces of one country violate the frontiers of another within the zone, or of West Berlin or the accesses to that city. Access to Berlin shall not be interrupted, pending a final agreement upon the complex of problems embracing Berlin and Germany.*

2. We consider it urgently necessary that those nations concerned with the German Problem which have not already done so, and in particular the former occupying powers together with the Federal German Republic,

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* P. Hess and G. Rienäcker made reservations in respect to mentioning the issue of the accesses to West Berlin in this context, since they hold that the question can only be solved together with the solution of the West Berlin Problem in its entirety.

should recognize and guarantee the existing frontiers of Germany with neighboring states. This recognition could and should come in advance of the signing of a German Peace Treaty and would, we believe, remove some of the obstacles that at present stand in the way of a treaty.

3. We endorse, as at our 11th Pugwash Conference, the idea of a nuclear freeze in Central Europe on both sides of the demarcation line and we urge that the governments concerned should give urgent attention to it. Such a measure would be a valuable step towards the reduction, or elimination, of nuclear weapons in Europe. The technical aspect of control will require further study by the governments concerned and independent groups. We ask the Continuing Committee to arrange for a study group on this subject to be established.

4. We urge that the governments concerned with the establishment of a Multilateral Force (MLF) should abandon it. We are opposed to this project because it adds nothing to military security while it increases political tensions and the danger of nuclear proliferation.*

B. Further Steps

5. We would welcome the establishment of nuclear free zones in Scandinavia, the Balkans, Africa, Latin America, the Middle East, and in South and East Asia together with Australasia. These zones could be established either through treaty or unilateral declarations of the countries in each region. The nuclear powers, acting separately, in combination, or through the United Nations, should be prepared, if asked, to guarantee the participating nations against the illegal introduction of nuclear weapons into these zones, or any consequences arising therefrom. Participating nations should consider the difficult technical problem of establishing a reliable control system, preferably under the aegis of the United Nations or one of its agencies.

6. We have considered the question of demilitarized zones, big and small, in Central Europe and specific measures to prevent surprise attack. We believe it to be possible and expedient to establish fully demilitarized strips on either side of the line dividing the armed forces of N.A.T.O. and the Warsaw Treaty Organization. In the demilitarized strip, whose size and boundaries would be defined by agreement between the parties, control

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* H. Kissinger did not participate in the discussion of this topic.

posts would be established, and any other steps would be taken by agreement, so as to ensure the prompt detection of any violation of the demilitarized strips by the movement of troops or armaments. The sizes of contingents of border police, and the specifications of their arms, should be the subject of negotiation and agreement.

7. It would be possible and expedient for the purpose of preventing a surprise attack to limit the numerical strength of armed forces in definite agreed zones extending east and west beyond demilitarized strips established on either side of the line dividing N.A.T.O. and the Warsaw Treaty Organization. Control posts would be established in these zones at communications hubs, in major ports, and at airfields, and the commands of the two sides would exchange representatives. There would be advance notification of substantial troop movements.

C. Outstanding Problems

8. We have thoroughly and very frankly discussed certain other problems, among them the problems of the existence of forces on foreign territories and of foreign bases. We were able to gain a better understanding of the arguments in favor of the evacuation of forces and the abolition of military bases as well as the arguments in favor of maintaining them, from political and from military considerations. There is a need for further study of this problem at the next Pugwash Conference.

9. On the problems of Berlin, the signing of a German Peace Treaty and the unification of Germany, more discussion and study will also be required. We recommend that a Study Group be established to examine the problem of Germany and to report, if possible, to the next Pugwash Conference.

10. We also recommend that either a general study group or local groups give attention to the moral and legal aspects of the possible activities of scientists in the production of weapons of mass destruction outside their own countries.

Members of the Working Group

H. Afheldt
P. V. Andreyev
L. R. B. Elton
K. Fowler
B. Glass
P. Hess
L. Infeld
H. Kissinger
J. Maddox
J. Moch
H. Morgenthau
G. Rienäcker
A. Snejdarek
F. Sorm
N. Talensky
H. A. Tolhoek

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13th Pugwash Conference on Science and World Affairs

Karlovy Vary, 13th - 19th September, 1964

REPORT OF WORKING GROUP 2

MEASURES TO PREVENT THE FURTHER SPREAD OF NUCLEAR WEAPONS

The common resolve of the United Nations to halt the further spread of nuclear weapons was expressed by the unanimous adoption in October 1961 in the General Assembly of a resolution introduced by Ireland calling for:

"... the conclusion of an international agreement containing provisions under which the nuclear states would undertake to refrain from relinquishing control of nuclear weapons and from transmitting the information necessary for their manufacture to states not possessing such weapons, and provisions under which states not possessing nuclear weapons would undertake not to manufacture or otherwise acquire control of such weapons;"

The Irish resolution was passed almost three years ago - but the nuclear non-dissemination treaty it proposes has not yet been concluded. It is the purpose of this report of Working Group 2 at the 13th Pugwash Conference on Science and World Affairs to suggest a set of proposals which, if adopted as a whole or in substantial part, could provide a basis for a fair and effective agreement to prevent further nuclear proliferation.

Most of these proposals are now under consideration in the 18-Nation Disarmament Conference in Geneva. We believe that the adoption of these proposals by the Geneva Conference, which we hope will soon be joined by its missing member-France, will provide strong impetus towards progress on measures of more substantial and eventually comprehensive disarmament. We do not see how, without such progress, proliferation can be prevented in the long run.

A. Proposals

The first and most direct step would be the conclusion at the earliest possible date of agreements:

1. whereby all nations presently possessing nuclear weapons would undertake not to transfer these weapons or control over them or

technical information relating to them to any other state or group of states; and

2. whereby all nations not possessing nuclear weapons would undertake not to produce such weapons or to acquire them or control over them or the special technical information necessary for their production.

For obvious reasons it would be much easier for the non-nuclear powers to undertake such an obligation if the major powers had agreed on some substantial disarmament measures. But pending such an agreement it would contribute to the speedy adoption of the non-dissemination agreements and render them more effective if a number of collateral measures could be simultaneously undertaken by the nuclear powers.

3. All governments should take whatever measures may be open to them to prevent their scientists, with experience in the field of nuclear-weapons technology, from contributing to the development of the nuclear-weapons capacity of any foreign powers;

4. The government of each of the nuclear powers should undertake not to transfer to other countries fissile materials of nuclear weapons grade, except that it shall be permitted to transfer small quantities of plutonium and enriched uranium for nuclear research purposes. The degree of enrichment of uranium for use in power reactors should be limited. The transfer of enriched uranium and plutonium for power reactors should be subject to strict international controls.

The above measures bear most directly on the acquisition or manufacture of nuclear weapons by nations at present without them. In addition to these, however, there are a number of very important measures which should be undertaken in parallel with the above, and which have a very direct bearing on the non-proliferation of nuclear weapons and weapons technology:

5. The negotiation of a treaty extending the partial nuclear test ban to include testing underground.

Successful negotiation of the underground test ban would make it illegal for any signatory nation to test <u>any</u> nuclear weapons and would, therefore, strongly inhibit the production of nuclear weapons by nations not now possessing them.

Furthermore, by preventing any further tests for the improvement of nuclear weapons, the universal test ban will slow down the arms race between the nuclear powers.

For the total test ban to be completely effective, it might be desirable to devise a system of graduated sanctions (political, economic

and possibly even military) to be applied in accordance with the United Nations Charter to states not acting in conformity with the provisions of the treaty, be they signatory or not.

Extension of the Test Ban Treaty to include underground explosions would be an essential step. The major obstacle to the immediate signing of a total test ban treaty is primarily political rather than technical and concerns the problems of verification. We do not believe that further improvements in the detection systems should be a precondition for the conclusion of the treaty. Nevertheless, further research may be expected to improve the systems for detection and identification of underground nuclear explosions and to help to resolve the problem of verification. We therefore welcome the initiative of India in setting up a new seismic detection laboratory for research on this problem; and we are pleased with the suggestion presented at this Conference that Sweden is considering a proposal for a new Institute devoted to research on problems of peace at which, among others, the seismic detection problem might be one of the research problems undertaken. Such programs will be most effective if carried out in co-operation with existing facilities in the nuclear nations.

We would like to see the total test ban treaty come into effect immediately. But, pending the final negotiation of the treaty, we feel it would be most desirable for the nuclear powers voluntarily to refrain from conducting further underground testing in the interests of halting this aspect of the nuclear arms race at its present stage.

In the meantime a small number of nations remain outside the partial test ban treaty. Further nuclear testing in the atmosphere by these nations will seriously weaken the prospects for universal and continued acceptance of the test ban. It is very important that ways may be found to convince the governments and the public opinions concerned of the inadvisability of these contemplated tests.

6. A cut-off of production of weapons-grade fissile materials.

As has been discussed at a number of our previous conferences, starting as far back as the 8th Conference in 1961, the present stockpiles of fissile materials possessed by the nuclear powers are sufficient to satisfy all the world's needs, both military and peaceful, for many years to come. It would be most desirable to cease further production

of fissile materials for weapons use, in particular highly enriched uranium 235. Although a verified cut-off would eventually require some kind of inspection procedures, and could, therefore, probably not be negotiated as rapidly as the proposals suggested above, the cut-off might, nevertheless, be initiated relatively soon by application of the method of mutual example, pending the negotiation of an agreement.

Of even greater importance than the cessation of production of fissile materials by the nuclear powers would be the elimination of the possibility that non-nuclear nations could produce fissile materials for weapons use. This problem presents considerable difficulty, insofar as plutonium is concerned, since this element is produced in the normal operation of nuclear reactors and can, if extracted from the reactor fuel elements, be used for weapons purposes. The most direct approach to the solution of this problem would be to have all chemical extraction of plutonium carried out in just a few existing plants, either in the countries which originally supplied the fuel elements or in other internationally supervised chemical extraction facilities. Provisions for control over these plants, as well as verification that no U-235 separation facilities are in operation, would have to be negotiated as part of the treaty prohibiting the production; these controls could, if this should turn out to be the most effective way, be carried out by an existing agency such at the I.A.E.A.

B. Problems of Inspection

Most of the measures described above require very little, if any, inspection. We have deliberately excluded from this package such measures as the proposed freeze (which was discussed by Working Group 3) on delivery vehicles and new rocket systems which would, to be effective, require a greater degree of verification. Nevertheless, there might be some elements of a freeze on long range nuclear delivery systems which would be worth including in a non-proliferation package, and whose verification requirements might be no more complicated than the ones contemplated above. The important point is that the total inspection requirement of the entire package, even including some aspects of a freeze on delivery vehicles, would be rather modest. It might, therefore, be useful to consider the possibility of negotiating at one time the total inspection requirements for all these agreements,

with a limit to be established on the total number of on-site inspections relating to all these arms limitations measures, and with the division of these inspections between the various disarmament measures left flexible. Such an approach might overcome some of the difficulties on both sides with respect to the amount of verification and inspection permitted or required.

C. The M.L.F. and Proliferation

We have discussed the proposed N.A.T.O. multi-lateral nuclear force (M.L.F.). In particular, we have been concerned with the steps towards the further proliferation of nuclear weapons and weapons technology which would be represented by the creation of this force. In addition, we have noted that the prospect of the creation of this force is, at the present time, placing a serious obstacle in the way of the conclusion of non-proliferation agreements.

We have examined the arguments of proponents of the M.L.F. - that it is intended to provide a balance of strategic nuclear weapons in Europe and to inhibit tendencies towards the creation of independent national nuclear forces by European powers. But we are unanimous in our agreement that the proposed M.L.F. will represent, in fact, a significant step towards the further proliferation of nuclear weapons, and that this fault far outweighs any possible arguments in its favor. And we are opposed to the current tendencies and suggestions for the establishment of a joint European nuclear force on the same grounds.

We strongly urge the governments of the N.A.T.O. countries to reconsider the M.L.F. project and to drop or at least postpone it in favor of the significant and effective measures of non-proliferation discussed above, now under active consideration in Geneva. We feel that the measures which we advocate in our report are of such great importance in preventing further nuclear weapons proliferation and in promoting further measures of arms limitations and disarmament, that it would be tragic if the M.L.F. would be responsible for failure to agree on these. We further believe that assurance of the intentions of the nuclear powers to maintain and retain ultimate control over the weapons which they produce is essential if we are to succeed in achieving any further significant measures of disarmament and detente.

The six measures outlined above comprise an effective program for prevention of further nuclear proliferation. We have also discussed measures of arms control not directly related to this problem. Thus, a number of actions could be undertaken by the governments of the major powers, as well as some other nations, which would greatly help in the reduction of tensions and in establishing an atmosphere which would promote progress toward serious negotiations.

One of the most important steps that could be so undertaken would be a proclamation by the Heads of State, most particularly of the United States and the Soviet Union, affirming that their governments would not be the first to initiate use of nuclear weapons in any conflict. Of further usefulness along these lines would be declarations by all governments, large and small, reaffirming the Geneva Convention of 1925 regarding biological, chemical and radiological weapons. Such declarations, universally accepted, would go a long way towards convincing peoples that disarmament, and most especially nuclear disarmament, is both feasible and probable.

There are, of course, many other steps of arms limitation which can be initiated either unilaterally or in concert by governments, by way of the method of mutual example, which would be helpful in the present world situation. Those which we have discussed include:

a) further reductions in military budgets and in troops and armaments;

b) further voluntary curtailment and cut-backs on nuclear weapons material production;

c) agreement by non-nuclear powers either to accept nuclear weapons nor to attempt to produce them independently (i.e. formation of the so-called non-nuclear club);

The method of mutual example, although of somewhat limited usefulness for achieving substantial arms reduction, is an extremely potent political device through which the nations can more readily start to move along this path we urge its use on every possible occasion by all militarily significant states.

We recognize that our proposals do not yet represent steps of substantial disarmament. Nevertheless, we believe that their implementation will contribute in a significant degree to halting the present arms race. Even such measures are important in progressing toward our main goal - the conclusion of a treaty of general and complete disarmament under effective international control.

Members of the Working Group

D. J. Adler
L. A. Artsimovich
P. Biquard
R. Björnerstedt (observer)
B. T. Feld
C. R. Frisch
K. Lepter
Patricia J. Liddon
M. D. Millionshchikov
F. Nemec
J. Orear
F. J. A. Tervisscha van Scheltinga (observer)
V. C. Trivedi (observer)
A. P. Vinogradov

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13th Pugwash Conference on Science and World Affairs

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REPORT OF WORKING GROUP 3

PROGRESS TOWARDS COMPREHENSIVE DISARMAMENT

We have studied ways of approaching the beginning and accelerating progress towards general and complete disarmament (G.C.D.). The problem is becoming increasingly acute, for the arms race is proceeding rapidly in spite of the definite improvement in international relations during the past few years. Present programs, unless checked, will inevitably add hundreds of new delivery vehicles to the armaments of the world, and several additional nuclear powers may soon appear on the scene. In these circumstances, rapid progress in disarmament becomes a necessity more than ever before.

In the present circumstance it is worthwhile to consider preliminary measures which, while firmly oriented towards a G.C.D. treaty, need not necessarily await its detailed negotiation. Certain large-scale measures of this kind have been our main concern. In particular, we have tried to envisage a time sequence of disarmament measures leading to a G.C.D. treaty, together with a parallel time sequence of verification procedures. Within this general context we have discussed the destruction of bombers, a freeze on the production and technical specification of strategic delivery vehicles, substantial reduction in these vehicles, the roles of minimum deterrent and of the nuclear umbrella.

Having discussed these problems we reached the following conclusions:

1. The U.S.S.R. and the U.S.A. have each made official proposals to eliminate completely, or to reduce substantially, their strategic bomber forces. Such a step would represent a drastic reduction in the number of available delivery vehicles. There exist difficulties regarding the definition of a bomber force, but it was agreed that for this purpose it should be sufficient to specify the numbers of each type of aircraft to be destroyed on each side, the type being defined in terms of essential characteristics. We agreed that observation of the destruction of bombers would provide sufficient assurance for the execution of this measure.

2. We recommend that resources freed by the elimination of bomber forces should not be applied to other, and possibly more dangerous, forms of armament. To help avert this hazard, bomber destruction might be accompanied by comparable allocations of resources to specific peaceful uses, including international development.

3. A further measure about which there should now be little difficulty would be a complete cut-off of production of military grade fissile material for weapons purposes. Production for verifiable peaceful purposes will be permitted.

4. We have considered the positive aspects of the freeze proposal among which is the fact that further production of strategic delivery vehicles is one important factor in the continuation of the arms race and that, consequently, the stoppage of such production would be a step in the right direction. A freeze would signal to the world the desire of the nuclear super-powers to accomplish major disarmament. This could greatly improve the outlook for halting the spread of nuclear weapons to nations not now possessing them, and would help persuade the other nuclear powers to adopt similar measures. The freeze on nuclear delivery vehicles must be further defined in many important respects before it can be decided whether it could be made equitable to both sides. There are, for example, problems connected with verification and with allowed improvements and replacements of delivery vehicles. Because a freeze does not of itself remove all the dangers of the arms race, these problems would be considerably eased if the operation were regarded as taking place within the framework of a treaty of general and complete disarmament.

5. We also discussed a possible measure for making substantial overall reductions in strategic delivery vehicles (long-range bombers and missiles) either down to agreed numbers or by agreed numbers; the latter approach would seem to ease inspection problems. The discussion covered possible means to verify a production stoppage and reductions in strategic delivery vehicles including the use of an international control agency. We believe that the reductions discussed here would constitute a significant step towards achieving disarmament. However, we have been unable to reach full agreement on this question and recommend further extensive discussion.

6. In this connection we consider that it would be useful to set up a special study group to prepare a report on large-scale measures to accelerate the process of general and complete disarmament and to form the basis of our discussions at the next conference.

7. We also explored ways to relate proposals for a stoppage of production and substantial reductions in strategic delivery vehicles to a treaty of general and complete disarmament which might include the principle of a nuclear umbrella. It was agreed that efforts to achieve general and complete disarmament must continue, and in this connection there was continued exchange of views on the proposal to retain until the third stage of disarmament a limited number of nuclear delivery vehicles and anti-missile and anti-aircraft missiles to help guarantee security during the process of disarmament. The size and composition of such a nuclear umbrella were further explored. We noted the proposal that the umbrella should contain a sufficiently adequate deterrent element, but anit-aircraft and anti-missile elements as well.

8. We referred in passing to the multilateral force. As a result of our discussion we could fully endorse the view expressed in the report of Working Group 2.

Members of the Working Group

I. Agerbiceanu
A. A. Blagonravov
P. Doty
C. Dregulescu
B. H. Flowers
T. Förland
J. Kozesnik
Betty Lall
M. Meselson
P. J. Noel-Baker
V. P. Pavlichenko
J. K. Wright (observer)

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13th Pugwash Conference on Science and World Affairs

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REPORT OF WORKING GROUP 4

PROBLEMS OF COLLECTIVE SECURITY

A. Security Problems of the Present World

1. Increasing the effectiveness of the U.N. in keeping the peace

The United Nations has played an increasingly important role in preserving the peace by bringing about the peaceful settlement of disputes between nations, and by other peacekeeping means. We have considered various ways in which its effectiveness in keeping the peace can be enhanced. The U.N. has the ability to act in many ways to maintain peace, including diplomatic, judicial, political, economic and, in extreme cases, military measures. In this regard it is important to place military action of the U.N. in proper perspective. Military action is the method of last resort, and it is important to avoid the tendency to overrate the effectiveness of this type of action and to resort to it too readily.

Nonetheless, there are certain cases where direct military action by the U.N. is necessary. In our discussions we drew a clear distinction between the type of U.N. peacekeeping operations which have been carried out to date, and the enforcement action envisaged in Chapter 7 of the U.N. Charter. Up to the present time, peacekeeping forces have operated on an ad hoc basis, with the consent of the governments on whose territories they were acting. The U.N. has not as yet employed the type of enforcement action which is authorized in Chapter 7. The latter type of action is possible under Chapter 7 only after the conclusion of the agreements envisaged in Article 43. The implementation of this provision making possible enforcement by military action can be carried out only when there is full agreement between the great powers. In this regard we welcome the recent memorandum of the U.S.S.R. Government of July of this year containing its endorsement of the implementation of this type of peacekeeping machinery. This method is the only mechanism in the U.N. which will be capable of safeguarding the territorial integrity and security of nations by enforcement action.

U.N. security forces have sometimes carried out duties of a military character, but sometime have essentially done police work. We feel that consideration should be given to the more regular use of civilian police personnel to carry out the latter function.

We discussed the organization of the U.N. peacekeeping forces. It was felt desirable that there should be stand-by police units as well as military contingents to be provided on a voluntary basis by U.N. members. These forces would both be specially trained to handle the type of situation which the U.N. has frequently faced in the past. It was also thought that wider use of U.N. observers would be helpful. However, there would not be a standing U.N. military force. This was felt desirable as specific crises may require the use of different national contingents. A stand-by system would allow the troops to be stationed permanently in their home territories until they are called into action. However, such a system does have the disadvantage of bringing into common operation groups which have their own national biases and customs, and this sometimes creates difficulties. In order to build stability into this system, it would be desirable if the contributing states committed themselves not to withdraw their troops until the peacekeeping operation had been completed.

We agreed that U.N. contingents should be drawn from all countries, excluding normally the permanent members of the Security Council. This includes contingents from smaller members of both political blocs as well as the non-aligned nations, which have been used so frequently in the past. In this regard we welcome the inclusion in the above-mentioned memorandum of the U.S.S.R. Government of the suggestion that the socialist countries should also contribute to the U.N. peacekeeping operations. As a practical measure, it seems reasonable that the commanders of the U.N. peacekeeping forces should be drawn from the contributing nations. The staff may thus comprise participants from nations of all three groups.

The overall command of the peacekeeping operations should be vested in a single commander. This position is not a permanent one and, in accordance with previous practice, we think it desirable that different men rotate through this position during prolonged peacekeeping operations. The body responsible for U.N. enforcement measures is the Security Council. In the past some peacekeeping operations have been carried out by authority of the General Assembly. The legality of this procedure is a matter of controversy which we did not discuss in detail.

2. Financing of U.N. peacekeeping operation

At present, the question of financing peacekeeping operations is a matter of controversy. The opinion was expressed by some members of the group that the required amount and the method of raising it should be determined on each occasion by the Security Council, which decides on the character of the operation.

As an alternative to the ad hoc financing of each operation it would be desirable to have a stable income to support the peacekeeping operations of the U.N. This would obviate the necessity of making an ad hoc assessment for each individual operation and would thus provide substantial stability to the peacekeeping activity. Several possible sources of such income were suggested by members of the group.

One of those was a direct assessment of the member states, the magnitude of which might possibly be related to the size of each nation's military budget. Another mechanism which was discussed was that of obtaining money indirectly, for example having the U.N. obtain royalties and lease the rights to exploiting minerals and other materials obtained under the high seas, or possibly introducing a U.N. tax on the use of communication satellites in outer space, or the establishment of a small tariff on international trade. These and other suggestions require further study.

3. The Special Security Problem of the Non-Aligned Nations

The implementation of the enforcement provisions of Chapter 7 of the U.N. Charter, which has been discussed above, is of great importance for the non-aligned nations, which must either carry a heavy burden of defense expenditure or rely on guarantees of help.

We have considered the situation under which they may require assistance from U.N. when force is used against their territory. The relevance for singling out this problem in addition to the military factors already discussed is due largely to the fact that enforcement action by the U.N. can most easily be implemented in cases where the direct interests of the permanent members of the Security Council are not affected, which is most likely in questions affecting the non-aligned nations.

Sufficient guarantees should be provided for the security of these nations by the implementation of the security system provided by Chapter 7 of the Charter. It was felt that even a partial implementation of Chapter 7 could, on the one hand, meet the need for a security of the non-aligned countries, and, on the other, further the cause of full implementation of the Charter. That is why it was considered advisable that non-aligned countries conclude

promptly the agreements envisaged by Article 43. Provision should be made in this connection for standby contingents from such states, available for peace-keeping operations and possibly for enforcement action. On their side the permanent members of the Security Council should undertake - through declarations or agreements not amounting to an amendment of the Charter - to guarantee to put their full weight behind the protection of the non-aligned nations against the use of force by another nation against their territory.

4. Declarations excluding the Use of Force

The 12th Pugwash Conference at Udaipur recommended an agreement to prohibit the use of force in settlement of territorial disputes. We recognize the value of such an agreement, or of simultaneous declarations by nations in the same sense, as discussed in the recent message by Prime Minister Khrushchev and the reply from President Johnson. This is in spite of the fact that the obligation not to use force is part of the U.N. Charter, both because not all provisions of the Charter have in practice been observed and because such agreements or declarations could apply to nations which are not now represented in the U.N., such as the G.F.R., G.D.R. and the People's Republic of China.

We also discussed the desirability of a more comprehensive agreement or declaration, which would rule out the use of force by any nation in violation of the territorial integrity of another. Such a prohibition would not, of course, exclude self-defense, or collective action authorized under the provision of the U.N. Charter. It would not be relevant to internal affairs and, therefore, would not apply to civil war or revolution.

In the event of internal strife, it would, however, exclude other nations helping either side by armed force.

We believe that in the context of the U.N. resolution for ending colonialism, it is now appropriate for the U.N. to take an active part through all measures available to it in support of colonial populations attempting to gain freedom.

5. Methods for the peaceful solution of disputes and for peaceful change

I. The present weapons situation makes the peaceful settlement of conflicts more necessary than ever, while the growing feeling for peaceful co-existence makes it more feasible.

It was felt that methods of peaceful settlement of disputes and of change should develop at the same pace as peacekeeping machinery. Of

course, both bilateral and multilateral negotiations and treaty-making will remain the most important method. We are aware that the traditional means of settlement are and will be used on a wide scale. On the other hand, the emphasis put on collective diplomacy (through collective, U.N. or regional, conciliation and mediation) in recent years, shows that the solution of specific disputes is of world-wide interest. We considered a number of proposals which were found to merit further study, though we did not arrive at a common view of the importance and likely effective of these various steps.

II. (a) In the interest of a better understanding of the nature of specific conflicts, a proposal was made to consider the creation of international research institutes which should - with the consent of interested states - aim at evaluating both the social and political, as well as the economic significance of specific disputes.

(b) As regards negotiations, it was suggested that some specific principles might be developed - possibly within the framework of a code of behavior of peaceful co-existence - applying to the conduct of negotiations.

(c) It was suggested that the possibility of using advisory opinions of the International Court of Justice in promoting the peaceful solution of conflicts be explored, since such an advisory opinion asked for by an authorized body, on the request of both parties, might well prove useful in bringing the parties to agreement.

(d) The strengthening of the U.N. fact-finding capacity was also advocated, mainly by suggesting (i) standing centralized or regional fact-finding bodies; (ii) substantial development of the U.N. panel of observers; (iii) creation of U.N. offices in every member country.

(e) It has also been suggested that the service of international experts not committed to any of the interested parties could be more widely used in the solution of certain kinds of disputes, particularly in the application of quiet diplomacy before disputes become acute.

III. The possibility of developing binding methods of settlement in our world has been seriously questioned. Nonetheless some tentative suggestions have been put forward to the effect that:

(a) A mutual example policy among, e.g. Western, countries in the acceptance of the compulsory jurisdiction of the International Court of Justice be advocated;

(b) The possibility be considered of using procedures of an intermediate nature between completely binding and purely persuasive processes, such as the use of limited escape clauses in otherwise binding procedures.

B. Security in a Disarmed World

We noted the report on this topic from the 9th Pugwash Conference. The following general principles guided our discussions:

We believe that the achievement of general and complete disarmament will be one of the guarantees of security and will make it very difficult for international disputes to develop into armed conflicts. We envisage that the control and inspection system will be based on the United Nations Charter, which provides for such measures as political and economic sanctions and, as a last resort, for military enforcement. The inspection methods should be flexible and responsive to scientific and technological developments. Such an extensive international control system will favor the stabilization of a peaceful world. It will be necessary to ensure that there is provision for peaceful change in place of the traditional use of armed force. We feel that permanent security cannot rest alone upon international military and police forces but that general and complete disarmament will bring about, and depend upon, a changed international climate which in turn will encourage the development of new modes of international behavior and new instrumentalities as well as changes in the existing ones. A disarmed world will be very different from the present world. Not only will political and economic relations between states change, but the continued advance of science and technology may have implications beyond our present vision. We believe that the most urgent duty of scientists and scholars is to make investigations and studies so as to assist in preparing mankind to live in a disarmed world. Since the fear of disarming without the assurance of security for the sovereign state is one of the important obstacles to the achievement of disarmament, it is important now to establish confidence that peace can be maintained in a world without national military deterrents. Furthermore, in the long run, a peaceful world requires the solution of such issues as racial inequalities and economic disparities between nations and peoples.

Not only will the attitudes of states and peoples be changed in a disarmed world, but it would appear that the new international situation will require new international institutions which should be within the framework of the U.N. For example, there will obviously have to be permanent international machinery to watch over the observation of the disarmament treaty. World institutions regulating international co-operation in many fields of the natural and social sciences may occur as a necessary feature of a disarmed world.

Finally, the structure of the peacekeeping machinery of the U.N. deserves constant study. As indicated in the first section of this report, there is no need in the present world for a standing U.N. military force. The opinion was expressed by members of the group that in a disarmed world this may not necessarily be the case. We feel that special attention from a Pugwash study group should be directed to present and future international peacekeeping machinery.

Members of the Working Group

Ruth Adams
R. J. Bunche (observer)
G. Burkhardt
Laura Forlati
J. Galtung
D. Glaser
V. Hanga
A. Joxe
V. M. Khvostov
O. Kofoed-Hansen
A. M. Kuzin
R. E. Peierls
A. Rich
B. V. A. Röling
J. Rotblat
V. Sarabhai
K. Siska

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13th Pugwash Conference on Science and World Affairs

Karlovy Vary, 13th - 19th September, 1964

REPORT OF WORKING GROUP 5

AIMS AND METHODS FOR PEACEFUL COLLABORATION AMONG NATIONS

A. Role and Responsibility of Scientists in Advancing the Cause of Peace

We were asked to begin by considering general questions related to the role and the responsibility of scientists in advancing the cause of peace. The view has sometimes been taken that the Pugwash Movement should confine its attention to the decisive problems of disarmament. In this connection we have the following observations to offer:

In our time two challenges have been placed before mankind; to abolish war; and to create a world advancing towards greater and more universal wellbeing. The first challenge calls for universal disarmament and peaceful co-existence between countries with different political and economic systems; the second, for this co-existence to be not merely passive, but constructive and co-operative.

Both challenges arise from the scientific revolution which has made wars among major nations suicidal for all of them, and has at the same time given mankind the tools for an enormous increase in productivity; it has established close and rapid communication between all parts of theearth, and h thus ended forever the isolation in which large parts of mankind have lived in the past.

The twin tasks of achieving disarmament and of establishing active constructive co-operation among nations for their common benefit are closely related. Progress in disarmament would allow a great increase in the scope of international co-operation; while progress in international co-operation would contribute to that international confidence which comes from working together for common aims. It would thus help to reduce one of the main barr to disarmament - the distrust between nations. Thus, in working for disarma we help international co-operation; and in working for international co-operation we facilitate disarmament.

Scientists have a personal and professional responsibility in both these areas. They are intimately aware of the destructiveness of existing weapons and the increased dangers which would result from their further deve pment

if the arms race continues unchecked. For this reason, and because many problems call for scientific and technological consideration, scientists can and must contribute to finding ways towards disarmament. Secondly, since scientists are acutely aware of the creative potentialities of science, and because science is by its very nature a common undertaking of mankind which has given scientists long and fruitful experience in international collaboration, they have a particular responsibility for strengthening co-operation between nations and for promoting their common progress towards a peaceful and increasingly prosperous existence.

The increasing role and importance of science in a contemporary society inevitably results in a growing influence and responsibility of scientists in the economic, cultural and political developments of nations. They should use their influence to promote further reduction of international tensions, and increases in international contacts and co-operation. They should help their governments in the development of policies contributing to permanent peace and to the wellbeing of all people. They should contribute to the reconciliation of divergent points of view on ways to achieve complete and controlled disarmament; and to the elaboration and implementation of principles and methods of peaceful co-existence. And they should be alive to the changing needs of science itself in a period of rapid transformation, seeking to promote its timely and balanced development together with education and technology, both nationally and internationally, as an indispensable instrument for our future.

In accordance with this point of view, we have reviewed many developments in international co-operation, and have reached agreement on a number of specific problems and recommendations which are described below.

1. International Co-operation Year

We noted with satisfaction that the Continuing Committee proposes to devote a large part of the 14th Conference, to be held in Venice in April 1965, to International Co-operation in Science and Technology. We believe that this is particularly fitting for a conference to be held during the United Nations International Co-operation Year. We recommend that, as our contribution to the International Co-operation Year, the Continuing Committee should supply the United Nations Economic and Social Council with a summary of Pugwash activities, both in fostering international co-operation and in studying, on an international scale, the problems of complete and controlled disarmament.

In addition, we hope that the role of science and technology in the development of new nations, and the possible co-operation in this field between the developed and the developing nations, will receive close attention in one of the forthcoming conferences.

2. Exchange and Travel of Scientists

One of the most important aspects of international co-operation in science is personal contacts between scientists from all countries. In reviewing the present situation in this field, we have agreed on the following recommendations:

(a) We believe that the flow of scientists between Eastern and Western countries for the purpose of undertaking research has been an important factor in increasing international understanding and in decreasing international tension, in spite of the fact that this flow has hitherto been small. We reaffirm the recommendation made at the 7th Conference at Stowe, that traditional forms of scientific interchange by individual invitation from scientists and scientific institutions should be encouraged and facilitated. But we believe that this interchange, both official and unofficial, should be increased by a large factor in the near future.

There are many features of current exchange agreements and of their administration which hinder existing programs and which will, if continued, prevent an increase of interchange to the level we believe desirable. We therefore urge academies and other institutions, both East and West, which are involved with exchange, to survey their existing exchange agreements and administrative procedures and to simplify them as much as possible. We bring this situation to the attention of the International Council of Scientific Unions and suggest that it consider the desirability of calling a special conference to discuss it.

(b) Participation by scientists in international scientific conferences is also an important element in increasing international understanding and in decreasing international tensions, and should be increased in scope. Scientists are often prevented, however, from attending international conferences either because authorities in a scientist's own country refuse him permission to leave, or because authorities in the country in which a meeting is to be held refuse permission for him to enter. Especially difficult restrictions are placed on scientists from the German Democratic Republic by the Allied Travel Office in Berlin. We urge all nations to eliminate these barriers to scientific communication. We note with

approval the formation, within the International Council of Scientific Unions, of a Committee on Free Circulation of Scientists to study these problems and make recommendations for their solution. We urge all nations to give careful consideration to the recommendation which may be made by that Committee.

3. International Research Institute and Programs

(a) The World Health Research Centre (W.H.R.C.)

We have received reports from a number of scientists in the appropriate disciplines on a proposal considered in previous Pugwash Conferences for the establishment of a World Health Research Centre under the aegis of the World Health Organization, and on the plans of the European Molecular Biology Organization. We discussed them, and our observations are as follows:

The World Health Research Centre would aim to attack certain urgent problems of health which are being encountered on a world scale. Exceptionally important are problems related to the harmful effects of drugs and environmental pollutants; and special problems present in developing countries such as parasitic diseases and malnutrition. It is proposed that, in the early years of its life, emphasis would be given by the W.H.R.C. to these problems. Later, additional problems such as cancer, cardiovascular diseases and behavioral disorders would also be studied, and activities in such fields would gradually be expanded.

The establishment of a Research Centre on a world scale is a great undertaking requiring very serious consideration from many points of view, and there are few subjects today for which such a centre would not have to meet many weighty objections. There must be a manifest need, and sound scientific and technical justification; it must be demonstrated that a world centre, as distinct from a number of regional centres, is necessary; and the advantages and disadvantages for the contributing states must be clearly anticipated.

We are of the opinion that the World Health Research Centre is one of the very few organizations for which it appears that the above requirements can be met.

Man now faces potentially great and virtually unexplored hazards from the toxic effects of substances which he is introducing on an increasing scale

into his environment. Those substances may take the form of drugs and biological products, or of pollutants such as industrial wastes, pesticides, food additives and other chemicals. They may not only affect adversely the health and well-being of the present generation, by the induction of cancer for example; they may also produce profound effects on future generations by action on the human genetic pool.

An adequate attack on these problems requires an international centralized effort, involving many scientific disciplines, co-ordinated with national undertakings, to provide the scientific base for three main areas of work:

(i) Epidemiological studies on differing patterns of disease in many countries.

(ii) Research on sophisticated methods for the storage, retrieval and analysis of large amounts of information and data on health research, gathered on a world scale. Such methods would involve developments in communications science together with the elaboration of powerful monitoring techniques for the detection of phenomena related to the spread of communicable diseases and the appearance of toxic effects due to chemical substances.

(iii) Toxicological research on the organism and the cell, and at subcellular levels, with the aim of developing internationally acceptable principles and criteria for evaluating the safety of drugs; and for testing these and other chemicals for undesirable effects appearing both in the short and long terms.

Scientific knowledge is seriously deficient in all these fields. The magnitude and complexity of these problems are such that they require radically new scientific approaches and forms of scientific organization. For these tasks an international research centre is needed because no national or regional effort could cope adequately or efficiently with them.

An important element in the W.H.R.C. would be its regional research centres, involving collaboration with national laboratories, which could be of great assistance for the developing countries in defining their health problems and indigenous disease patterns, in planning their programs for improvements in health and the elimination of disease, and in training and assisting their health and research workers.

The continuing scientific vitality of a research organization is intimately connected with the fundamental research in which it is involved, and such activities must form an important part of the work

of the W.H.R.C. For this reason we strongly support the suggestion that the proposed laboratory of the European Molecular Biology Organization should be closely integrated in a suitable organizational relationship with the W.H.R.C.

The scientific justification and program for the W.H.R.C. has been the subject of careful study by eminent scientists for the past two years. Even when fully implemented the W.H.R.C. would be relatively modest in cost, but this will take several years of phased operation.

A powerful research group at the W.H.R.C., essential for its life and vitality, will be a great intellectual centre attracting many gifted young people from all over the world. It will be very important to prevent any widespread tendency to drain the talent from the developing countries. In this connection we may remark that because of its collaborating national research centres, and the profound importance of all aspects of health, especially for developing nations, the W.H.R.C. will be particularly well placed to resist such tendencies. The experience of such institutions as the European Centre for Nuclear Research at Geneva (C.E.R.N.) shows that, even in less favorable circumstances, conditions of employment can be devised which greatly limit such tendencies.

We therefore urge governments to take early steps to establish the W.H.R.C. so that its scientific work may start in the near future.

(b) World Centre of Scientific Information (W.C.S.I.)

The proliferation of scientific literature raises one of the greatest obstacles facing the efficient advancement of science today. Particularly in some disciplines, exponential growth of the literature is rapidly producing chaos and unnecessary duplication of effort. Scientists are unable to become aware of, and make use of, much of the scientific information relevant to their own researches. The scientific community has evolved like an organism with a quite inadequate central nervous system for storage and utilization of information. An urgent need has arisen for the development of a world-wide, systematic, co-ordinated and, as far as possible, integrated effort to store and retrieve scientific information. The existing abstracting services and systems for machine coding and indexing cover limited areas of scientific information; they are being developed independently so that information stored in one of them is not freely exchangeable with that in others.

More than simple unification and co-operation of the existing systems is needed. New systems will have to be developed to cover fields of science where none yet exist. An active program of experiment, trial and investigation of new methods will have to be undertaken. The systems of storage and retrieval should not be permitted to freeze at present levels of operation.

In addition to mechanical and technical systems permitting formal classification of new papers by subject matter, and the storage and retrieval of this information, systems will be needed permitting critical analysis as well as the abstraction of the content of these papers, and this will require the active co-operation of many members of the scientific community all over the world.

Radical developments in the methods of scientific publication may have to be considered to make possible a rational utilization of scientific information, such as publication on microcards or microfilm instead of journals of the present type. Eventually an international centre should be supplied with comprehensive reports of all scientific work for storage and dissemination to interested workers, together with briefer accounts to be utilized in content analysis storage and retrieval of information.

We recommend that work be initiated without delay towards developing a unified and co-ordinated system of scientific information storage and retrieval from the heterogeneous and limited beginnings that now exist.

We suggest that the co-ordination and unification of such systems should be advanced by carefully phased steps which might lead ultimately to establishing a World Centre for Scientific Information (W.C.S.I.). These steps should be the subject of planning by experts in information theory, communications and other scientific fields.

We recommend that a study group be established under appropriate auspices, such as U.N.E.S.C.O. or I.C.S.U. to undertake this task. Early steps are important if the solidification of different systems, which would render very difficult future international co-ordination and unification, is to be prevented.

(c) Co-operation in Space Research

We have received a report on the progress of the co-operation between the U.S. and the U.S.S.R. in space research. The report stressed the significance of two features of this development: the great influence of scientific co-operation on international relations, and the limitation imposed by the arms race on scientific co-operation.

The space research program provides a very good example of both features, particularly the second. So much of space research is relevant

to military planning, that the extent of possible international co-operation is at present limited. Nevertheless, co-operation is progressing, particularly through the international meetings of associations such as C.O.S.P.A.R., aerospace organizations, space medical groups, etc. Three special U.S. - U.S.S.R. meetings have taken place between leading space scientists of both nations.

Co-operation has been achieved in space medicine and biology through mutually planned experiments and exchange of information. A recent Soviet experiment in which a "space crew" spend four months under simulated space travel conditions, but without weightlessness, has revealed previously neglected effects of human organisms on the surroundings. A change and multiplication of bacterial flora was observed, together with a reciprocal effect of these factors on the crew, which call for new research and development.

Co-operation in global communication and the use of satellites has been initiated, but certain disagreements have arisen. The Soviet Union favors continued experimentation before deciding on a particular common system. In the United States it has been decided to proceed with the development of a system based on some successful experiments. This system is in the hands of a private corporation, which, the Soviet Union believes, involves the danger that less emphasis than is desirable will be placed on culturally significant uses of the global communication system.

The exchange of instrumentation and technologies has been progressing and is important for the development of standardized equipment. In the negotiations for the Allocation of Frequences for radio communication in space - progress has been a little slower than was hoped for at the Stowe Conference, but discussions are progressing satisfactorily. Agreements on mutual use of satellite tracking stations leave room for further progress. A Soviet-Australian agreement has been reached on the use of Australian tracking stations, but the greatest deficiency is still in the Southern hemisphere.

Greater progress towards a legal space code, covering such items as assistance to shipwrecked astronauts, disposal of stranded space ships, and responsibility for damage caused abroad by space experiments, appears to be desirable. We recommend the conclusion of an early agreement on these issues.

We expressed our great satisfaction with the progress of the U.S. - U.S.S.R. co-operation in space, and the desirability of its further development and extension to other nations as their space research efforts

come into operation.

We affirm the view expressed at the Seventh Pugwash Conference of the desirability of an international world-wide system of communications satellites because of its great cultural importance. We regret that differences of opinion between the United States and the Soviet Union as to the organization and technical nature of such a system still stand in the way of final agreement. We believe that these differences of opinion are reconcilable and hope that the governments of the United States and the Soviet Union, as well as other nations, will continue to study ways to overcome them.

(d) International Biological Program (I.B.P.)

The main idea of this program is to obtain data on the possibilities offered by our planet for the nutrition of living organisms, including the growing human population; and to learn how to increase this productivity by utilizing new areas, and by restoring the biological value to areas devastated by natural catastrophes or human activities. Further, the I.B.P. is to study human adaptability to unknown and new environmental conditions. Collaboration with W.H.O. in this field is being sought.

The I.B.P. has established the following working panels:

(i) Terrestrial Productivity (Ecology; Physiology; Conservation)
(ii) Freshwater Productivity
(iii) Marine Productivity
(iv) Human Adaptability
(v) Use and Management of Biological Resources

A training program of young scientists, especially from developing countries, and standardization of methods and measuring devices is also being planned.

The statutes of the I.B.P. suggest financing its activities from annual dues from the participating National Academies and from the funds of various organizations willing to support its research activities. The support of U.N.E.S.C.O., both moral and financial, has been secured.

We believe that the International Biological Program represents a very important activity of I.C.S.U., associating and combining the efforts of scientists throughout the world from various disciplines of biology and from many other branches of natural science.

We believe that its results will be of great benefit to mankind and will be important stimulus towards collaboration and understanding among

scientists, similar to that produced by the International Geophysical Year. We ask all biological and other interested scientists to give it its support.

We also warmly endorse other actions initiated by U.N.E.S.C.O. and I.C.S.U. promoting international co-operation in science such as the International Program in Atmospheric Sciences and the International Hydrological Decade.

B. The long term consequences of disarmament on science and technology

The subject of the "long term consequences of disarmament on the development of science and technology" was placed on the agenda of our meeting because it was the theme of a proposed study group to be organized jointly with U.N.E.S.C.O., and it was anticipated that its conclusions would be available for discussion. The formation of the study group was delayed, however, and we have confined our discussion under this heading to some of the problems already encountered in the advance of science which are likely to become increasingly important with the growth in its scale and significance. Such a rapid growth is indispensable for the maintenance even of present living standards among a rapidly increasing world population. It will have to be even faster if we are to solve the basic problem of eliminating the great and growing difference in the living standards of rich and poor countries. We therefore urge all governments to increase greatly the proportion of their scientific and technical resources devoted to peaceful purposes as compared with those for military applications. For the tremendous tasks before us, the release of resources and technically trained man-power through disarmament, and their effective redeployment, could be of very great importance.

For such an advance we need a balanced development in education, science and technology in all countries. We think it would be particularly timely to initiate studies, in addition to those recommended at Udaipur, to contribute to the formulation of policies in the widely varied circumstances of different countries. Among a number of important themes we may mention the following:

(a) The role and support of fundamental research. We believe it is important not to see the function of basic research too narrowly and to restrict it unduly in the desire to secure early economic returns, a tendency which is often observed.

(b) Problems of the proper relations between centres of higher learning in particular countries, on the one hand, and regional and international centres for scientific research, on the other hand; how to prevent the weakening of our universities through loss of too many of the most able young people to the research centres. Such centres are at present few but, in many disciplines, the growing needs in gifted men and resources required for significant investigations is likely to lead to their rapid increase.

(c) Problems related to the re-employment of scientific and technical personnel made redundant through measures of disarmament. We believe that such a study is important both from the standpoint of fears of unemployment, which could generate a resistance to disarmament, and in order to employ the powerful forces released to the best advantage.

We suggest that the Pugwash Movement should contribute to such studies by promoting the formation of study groups or by their inclusion in the agenda of its future meetings.

C. Swedish Proposal for a Peace Research Organization

We have learned with warm appreciation of the proposal of the Swedish government to establish and support a peace research organization in celebration of the 150 years during which Sweden has not been involved in war. Such an organization, independent and broadly international in its outlook and constitution, applying itself to concrete problems would be of great value in permitting a range of important studies, several of which have been suggested at previous Pugwash Conferences, but for which proper support has hitherto been lacking. Thus among many projects which might receive consideration by such an organization are:

(a) The establishment of a modern seismograph system, a so-called seismic cross, in Swedish territory as an important contribution to the problem of detecting underground explosions of nuclear weapons;

(b) A study of economic problems of disarmament;

(c) Development of needed resources for a growing population;

(d) Other topics referred to in this report.

Members of the Working Group

H. Alfven
D. Blaskovic (observer)
W. Boyd
H. Brown
M. M. Dubinin
J. Hochfeld (observer)
G. Jona-Lasinio
M. Kaplan (observer)
V. Knapp
R. Krause (observer)
J. Kuczynski
O. Maaløe
I. Malek
S. S. Medvedev
M. Nicolescu
L. Pal
C. F. Powell
E. Rabinowitch
V. Rabinowitch
M. Rubinstein
F. B. Straub
V. P. Suslov (obs.)
L. Vavpetic

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13th Pugwash Conference on Science and World Affairs

Karlovy Vary, 13th - 19th September, 1964

REPORT OF SPECIAL WORKING GROUP ON BIOLOGICAL WARFARE

A discussion of the present situation and potentialities for the future with regard to biological warfare since the 5th Pugwash Conference has resulted in the following conclusions and recommendations:

A. Conclusions

1. Continued research and development of biological weapons will result in compounding the difficulties in achieving general and complete disarmament.
2. The continued development of biological weapons and their introduction into the arsenals of nations would have a seriously destabilizing effect by increasing the number of nations possessing major mass destructive capabilities.
3. Accusation of preparations for the offensive use of B.W. weapons can be causes of serious tension. A suitable mechanism is, therefore, highly desirable to substantiate actual cases of such use of B.W. weapons.
4. After a review of the possibilities for preventing the development and production of biological weapons we consider that the outlook for controlling B.W. activities may be more promising than discussions at the 5th Pugwash Conference indicated. In order to explore the matter further we make the following recommendations.

B. Recommendations

1. A study group should be set up to examine the requirements for an inspection scheme for B.W. weapons and for cases of accusation. For trial purposes, the inspection scheme should be limited to a small group of Central European countries representative of Eastern, Western, and non-aligned nations.
2. The study group should carry out its work under the auspices of Pugwash. Since it is expected that results should be forthcoming within the next few months it is desirable that they should be reported to the 14th Pugwash Conference.

3. The Continuing Committee is asked to consider the financing of this study group as a priority project among those recommended to the proposed Peace Research Institute of Sweden.

4. The study group should consist of six to eight members recommended by the Pugwash Continuing Committee. The study group could then draw up a further panel of collaborating members for further participation in its work.

5. The study group should limit its work in the first instance to microbiological weapons. The experience gained could then be applied to the problems of chemical and radiological weapons.

6. The potential of radiological and chemical weapons and problems of their control should be the subjects for consideration at a future Pugwash Conference.

Members of Group

D. Blaskovic (observer)
G. Burkhardt
P. Doty
M. M. Dubinin
B. T. Feld
D. Glaser
B. Glass
M. Kaplan (observer)
A. M. Kuzin
Patricia J. Lindop
O. Maaløe
I. Malek
M. Meselson
A. Rich
J. Rotblat
F. B. Straub

Memo to invited guests
From the Council for a Livable World
Re: November 14 Arms Control Seminar

The enclosed paper "Prospects for Progress toward Arms Limitations Agreements", by B. T. Feld, is provided for your information and use for the forthcoming seminar.

Prospects for Progress toward Arms Limitations Agreements

B. T. Feld

10/19/64

The suggestions which follow are founded on at least two assumptions: One, that the new Johnson Administration will be interested in exploring vigorously in the next year serious proposals for arms control, for further political detente and possibly for limited arms reductions. And, second, that the new Soviet Administration will also be interested in continuing the detente with the West and in further steps toward political settlement and disarmament, especially in Europe.

If this is the case, a number of important steps might be taken which would help to reduce tensions and the dangers of nuclear war and contribute significantly towards halting and reversing the nuclear arms race.

In the following, I outline some of these possibilities as I now see them. These and other topics were extensively discussed last September at the Pugwash Conference in Czechoslovakia, and detailed proposals have been made in the working papers and reports of the Conference working groups. Below, I give my interpretation of the main aspects of some possibilities for negotiation which seem to me to be the most immediate and promising. It is important that these and other proposals along similar lines be considered and discussed, in the Administration and in Congress, early and thoroughly enough so that we may be prepared to take advantage of any possibilities which might open up in the early days of the new Administration.

I. A European Settlement: The U.S. has much of which to be proud in our postwar role in Western Europe. The Marshall plan sparked a remarkable economic recovery; NATO provided the protective shield under which European recovery was permitted to proceed without the threat of external interference and without the imposition of any appreciable economic burden of re-armament.

But the rebirth of a prosperous and independent Europe has brought with it problems concerning the continued viability of the Western alliance and the role of the European powers, particularly of a rejuvenated France and a resurgent Germany, in the international power structure. Faced with a formidable force of Soviet intermediate range nuclear rockets based on Soviet territory and targeted on the cities of Western Europe, and faced with the developing strategic nuclear standoff between the United States and the Soviet Union, the countries of Western Europe have had serious reason to begin to doubt the effectiveness of the American nuclear deterrent for guaranteeing their protection against possible attack from the East.

The reactions have varied from country to country: France, or at least the government of General DeGaulle, has concluded that her protection lies in creating her own, independent nuclear deterrent. With typical Gaullic independence, the General has concluded that even a small force -- capable only of delivering a suicidal "bee-sting" -- would serve the interests of France better than the massive force of the unpredictable Americans.

The German reaction has been to tighten, in all possible ways, her alliance with the US and to attempt to insure, by the continuing presence in Europe of American troops and "tactical" nuclear weapons, that the US would inevitably be drawn into any European conflict and would, in fact, not be able to prevent the escalation of conventional conflicts into a nuclear exchange. At the same time, by flirting with a Gaullist approach, the Germans have raised the threat of even further disruption of the NATO alliance.

The British, on the other hand, aware through painful experience of the difficulty and expense of achieving a significant nuclear force and cognizant of how little benefit is derived from the associated nuclear power status, are quite willing to recognize the seriousness and reliability of the American strategic nuclear deterrent against a Soviet attack on Western Europe. However, both for reasons of internal politics and in order to be able to balance the growing West German strength and influence in NATO, the British now appear to be reluctantly prepared to collaborate in some scheme for a greater NATO share in the nuclear deterrent.

None of the NATO nations has been willing to accept the solution proposed in the first days of the Kennedy Administration -- that of facing the danger of conventional attack by a buildup of European conventional forces -- even though such an approach has for some time been easily within the European capability. The difficulties with this approach have been two-fold: first, it is expensive, particularly insofar as it would require appreciable arms expenditures by the European nations. Second, none of the NATO countries really believes so strongly in the likelihood of a Soviet attack on Western Europe as to be willing to interrupt its economic growth by diverting an appreciable fraction of its resources into defense expenditures -- not unless there were important gains in that nation's ability to achieve other national goals.

There is, however, one area in which Soviet pressures continue to be felt and where the absence of political solutions continues to pose a threat to the peace of Europe. The area is central Europe -- in particular, the problems involve the German division, its eastern borders and the status of West Berlin. On the one hand, there is the universal unpopularity of the East German regime which has led to the construction of the Berlin Wall to prevent the migration of East German professionals to the West. On the other hand, there is the continued refusal of West Germany to recognize the post W.W.II borders with Poland (the Oder-Neisse line); the periodic reassertion by German officials of their claim on the Sudaten territories of Czechoslovakia (based on the infamous Munich agreement); the refusal to recognize in any shape or form the present division of their country or to provide assurance that its reunification only will be achieved by peaceful means.

In this situation, American policy has been caught between the Scylla of Russo-American detente, in which all serious approaches to a compromise solution of the German problem have been vetoed by the West German Government, and the Charybdis of a German-American military alliance, a prospect which is viewed with little less than horror by the other members of the NATO alliance and of which the prospect has undoubtedly made a serious contribution to the downfall of the detente-seeking Soviet regime of Nikita Khrushschev.

Caught in this dilemma, our State Department has succumbed to the blandishments of the solid, reliable and untemperamental West German ally and chosen to cast our lot with a new concept of NATO based on the closest American-German collaboration. We have proposed, and the Germans have accepted, to seal the bargain by the establishment of the multilateral force (MLF), in which we will henceforth be bound to the Germans with bonds of plutonium.

Without knowing where the new Soviet regime stands with respect to a possible German settlement and with respect to Arms Control agreements, it is difficult at this time to discuss alternatives. At least until the recent changes in the Soviet government, the possibility was excellent for a detente in Central Europe, involving the stabilization of present boundaries, guarantees on the integrity of West Berlin and of its approaches, and a freeze and possible cutback of weapons in Europe -- both nuclear and conventional. No one knows where we stand now, but, considering the stakes involved, it would be sheer folly at this time to press for the immediate conclusion of the MLF agreement, since this is likely to foreclose more significant arrangements. The insistance by the zealots in favor of the MLF on precipitous haste without adequate discussion -- either in public or in the Senate -- must be interpreted as demonstrating the uncertainties with which they regard its prospects in the light of more deliberate consideration. In any event, the problems of NATO and peace in Europe are ones which will not be eliminated by facile technical gimmicks such as the MLF. Bolstered by an overwhelming electoral victory and a mandate for progress towards international detente, with a Europe divided and uncertain of direction, our government can well afford the time and the thoughtful effort necessary to devise meaningful rather than superficial solutions to serious problems.

One direction, in which agreement now appears possible, is discussed below:

II. A Non-Proliferation Package: The fact, that the Chinese have finally succeeded in exploding their first primitive atomic bomb, reminds us that it is long overdue for the nuclear powers to devote more serious attention to the vital problem of preventing further proliferation of nuclear weapons and weapons technology. However, instead of bemoaning the vanishing of the time (as if it ever really existed) when China could be ignored in international intercourse, it would be far more constructive to try to re-establish and re-inforce those conditions which have made it possible for nations, technically much more advanced than China, such as India, Sweden and Switzerland, to forego voluntarily the expensive privilege of independent nuclear weapons

development. Applauding, as we should, the far-sighted wisdom of these countries in "opting out" of the nuclear arms race until now, we must recognize that unless the nuclear powers go out of their way to establish and maintain conditions which will continue to make this possible, the governments in such countries will find it increasingly difficult to resist the internal and external pressures for the acquisition of nuclear weapons.

In the final analysis, the prevention of further nuclear weapons proliferation depends on the universal recognition that nuclear weapons capability will no longer be regarded as the main symbol of status in the international community. Indeed, what is required is that it shall be universally acknowledged that nuclear weapons cannot be used under any circumstances for the settlement of conflicts among nations -- that, pending their verified complete elimination, the only justification for their possession, in strictly limited numbers, by the nuclear powers, is for insurance (deterrence) against their manufacture by nations not yet possessing them and against their use by any nation.

Admittedly, it will be some time before the conditions of political detente and mutual trust among nations will permit the verified reduction of weapons to "minimum deterrent" levels, accompanied by the requisite systems for collective enforcement of the prohibitions against proliferation. In the meanwhile, however, provided that reasonable steps are being taken by the major powers which inspire the confidence of other nations that there is truly motion in this direction, it may not be unreasonable to expect all nations to accept a series of restraints which are directly aimed at preventing -- or at least slowing down -- the further proliferations of nuclear weapons.

At the last "Pugwash" Conference on Science and World Affairs, serious consideration was given to a group of measures which, taken all together, could provide reasonable assurance against the further proliferation of nuclear weapons while exhibiting appropriate and balanced concern for the military security of both sides.

Such a package would include:

1) Agreement among the nuclear powers not to give nuclear weapons, nor the materials required for their construction, nor the technical information required for their independent manufacture, nor the control over such weapons to nations not now possessing same.

2) Agreement among the nations not now in possession of nuclear wespons neither to produce their own, nor to acquire them from other nations, nor the technological information required for their independent manufacture, nor the control over weapons produced by other nations.

3) Agreement among the technically advanced nations to prevent their nationals from contributing to the weapons development programs of other nations.

4) Establishment of strict controls over the transfer across national boundaries and the utilization for peaceful (research and power) purposes of all fissile materials capable of being diverted to weapons uses. At the present time controls are in effect over materials utilized in peaceful programs under the aegis of the International Atomic Energy Agency (IAEA), but a substantial fraction of all nuclear power development programs in the developing nations are preceding, through bilateral agreements with one or another of the nuclear powers, outside the control of the IAEA.

5) An agreed and verified cutoff in the further production of fissile materials for weapons purposes. Under such an agreement, there would be no further production of U^{235} of concentration above something like 10-20 percent, and all special plutonium production facilities would be closed down. However, plutonium being the inevitable by-product of nuclear power reactors, it would be necessary to place all chemical extraction plants for the re-processing of reactor fuel elements under strict international control to insure that the plutonium product could not be diverted to weapons use.

6) Extension of the three-element (the atmosphere, underseas, and outer space) nuclear weapons test ban to include underground testing. Such an extension and the assurance of universal adherence to the ban may require some verification beyond national systems, and possibly some means of enforcement to insure compliance; but the obstacles are political rather than technical. Which is not to say they are less formidable, since it will take time and diplomacy of a high order to achieve the adherence of France and China to any such agreements. Nevertheless, such a treaty, even if not universally adhered to for the time being, will have an important effect in inhibiting further weapons development and in encouraging further measures of arms control and detente.

7) As discussed in the preceding, the non-proliferation package will command much greater support if it can contain at least the beginnings of reductions in strategic nuclear weapons by the so-called nuclear super-powers. For example, substantial destruction of long-range bombers will decrease the "deliverable megatonnage" on both sides by a very large factor. Even a "freeze" at the current levels of long-range nuclear weapons delivery systems will amount to very substantial arms reduction when viewed from the weapons position in which we would both otherwise find ourselves after a few more years at the current pace of arms increase.

Some of the abovementioned measures, most particularly the last three, require measures of verification of compliance if they are to be effective, or even negotiable. However, the inspection requirements are nominal, especially if these measures are regarded as provisional and of limited duration, pending more substantial arms reduction agreements. Just as the non-proliferation package would appear to be more acceptable if negotiated more-or-less as a whole, so the necessary verification measures are probably more acceptable insofar as they are applicable to the entire package rather than to any single one of its aspects. Thus, rather than trying to specify the exact number of permissable on-site inspections to verify an underground test ban, or the number of sorties allowed for checking possible clandestine plutonium production plants, or the number of factory inspections needed to verify compliance with a missile production cutoff, it might be more feasible to specify a quota of permitted on-site inspections which could be apportioned by the inspectorate (or by the signatory) nations among the different aspects of the package in a manner which would be dictated by the experience gained in the operation of the agreement.

The problem of universal adherence to these agreements goes beyond the particular problems of France and China and their refusal to accept the test ban. In principle, if a sufficient number of nations join in these agreements, they could in time become endowed with some of the force of international law. Especially if the major powers could agree on such a course, it might be possible for the UN to declare failure to adhere as constituting a threat to the peace. In this case, it might be possible to apply sanctions -- ranging from economic to military -- against those nations violating the provisions of a universal test ban.

In practice, however, this course is unlikely except for the most flagrant provocation on the part of non-adhering counties. A more likely course would involve use of the well-tried "carrot and stick" technique -- offer of various enticements to include adherence coupled with the threat of sanctions if the violator remains adamant.

In the case of China, owing to her almost complete alienation from the international community, the range of possible actions permits of lots of "carrot" and practically no "stick". For this we have only ourselves to blame; we are now reaping the fruits of fifteen years of inane policy dictated by the China lobby.

If it were only a question of reversing present US policy and finding some means of bringing China into the international councils, we would only need to deal with American political myths. But the question is a more delicate one: precipitous haste to reward the Chinese atmospheric nuclear test by rapid elevation of China to great-power status cannot help but suggest to other nations that their national interests may be better served by the independent nuclear weapons course, in defiance of a universal test ban, than by strict adherence to it. There is nothing in the Chinese experience to suggest to the French that they have anything to lose by carrying out their proposed thermonuclear test in the Pacific next year. It is in fact not yet clear what moral should or will be drawn from the Chinese experience by the more advanced nations not yet in the nuclear club.

All this suggests how important it is that the nuclear powers agree among themselves to call a halt on further nuclear proliferation; that extension of the nuclear club must not only be resisted, but success in achieving nuclear weapons must in no way be rewarded. Implementation of a common resolve to prevent further proliferation, however, will require much greater degree of cooperation by the nuclear powers in pursuit of common interests than anything we have so far witnessed. The big question is: can we learn to work together to halt the spread of nuclear weapons before it is too late.

III. Strengthening the UN: Upon reconvening, probably sometime in December, the UN will immediately be faced with a number of crises. One will concern the admission of Communist China. A second will involve the attempt on the part of Western nations to force the Soviet Union to pay at least some of the previous assessments made by the General Assembly to defray the cost of peacekeeping operations.

With respect to Chinese admission, it will probably not be too difficult for the opposition, led by the US, to prevent this once more. Although sentiment for Chinese admission continues to grow, it is not likely that many of the unaligned nations will be particularly anxious to reward Chinese defiance of the world-wide sentiment against the explosion of nuclear weapons in the atmosphere by immediate admission into the UN. But this only postpones solution of a difficult problem; sooner or later the US will have to face up to the necessity of Chinese admittance into the UN and other international bodies.

The crisis on support of the UN peacekeeping efforts, on the other hand, is immediate and acute. The solution of depriving the Soviet Union of her vote in the General Assembly amounts to cutting off one's nose to spite one's face; it not only solves nothing, but will render the Assembly completely impotent.

The fact is that the UN charter vested peacekeeping operations in the hands of the Security Council precisely because of the recognition that no action involving the vital interests of one of the major powers could succeed without that power's acquiescence. In the long run, it is also in the interests of the US to maintain this principle and to refrain from undermining the effectiveness of the Security Council. The fact that we have, until now, managed to rally a majority of votes in the General Assembly behind our point of view on past peacekeeping operations is no guarantee that we will be able to continue to control a majority.

It was therefore most gratifying to observe an apparent Russian interest in estali ishing a viable UN peacekeeping mechanism, as manifest by a Russian proposal of last June and the interest of Russian Pugwash participants in this question in September. It should be the policy of our Government to explore further Russian intentions in this direction and, most particularly, to be prepared to consider compromise proposals in the current payments crisis. There is little to be gained and much to be lost by a hard and intransigent line; if, on the other hand, the indications of a birth of Russian interest in UN peacekeeping machinery are borne out, this next session of the UN may provide an unparalleled opportunity to begin setting up those international institutions which will be essential for maintaining the peace and verifying comp- compliance in a disarming world.

SD - DISARM?

[Oct. 1964?]

SPECIAL ADDENDUM ON ECONOMIC CONVERSION

OF DEFENSE INDUSTRIES

The conversion of the defense industry to the uses of peace is a task of major proportions. I have personally been very close to this nation wide problem. Almost two years ago this week (Oct. 7, 1962) I released a study of 370 major contractors prepared by the Foreign Relations Subcommittee. Defense employment today is 10 per cent or more of the manufacturing employment of 15 states. These are the states: Kansas 30.26 per cent; California, 29.59; Washington 29.07; New Mexico, 23.80; Conn. 22.15; Arizona, 20.58; Utah, 20.35; Colarado 17.80; Florida 17.19; Maryland 15.86; Mass. 13.22; Texas 12.65; Nebraska 11.98; Missouri 10.81 and New Jersey 10.79. This defense employment is almost wholly in facilities built for the production of specialized defense equipment in certain metropolitan areas such as San Diego,, with 81.8 per cent of total manufacturing in missiles and aircraft; Wichita, Kansas, 71.7 per cent; Seattle, 52.6 per cent; Los Angeles, 26.90 per cent.

These defense companies have given us, as a nation, new military powers. They have shown us the path to peace with a path of strength rather than weakness. The hard facts are that the production of the big missile is completed. The Atlas is out of production, except for boosters

continued.....

needed for space shots. The Titan's are in silo, although advanced versions are being used for Gemini space shots and the Titan 111 for a number of future space payloads. The Minuteman and Polaris programs will be at full strength in 1966. As a result, defense spending has leveled off and the time of cutbacks has arrived. Mounting unemployment in this industry emphasizes the need for discussing programs for an orderly transition of defense industry to civilian work. There must be coordination of Federal, state and local programs involving participation by business and labor in policy-making, planning and action.

There are major civilian areas, where massive engineering competence, typical of aerospace companies, is needed - large scale construction, mining of the ocean floor, sea farming, further air and space travel, integration of transportation systems, revitalizing the merchant marine, improved global communications, weather forecasting, nuclear electric power, salt water conversion, air traffic control systems, industrial process control systems, air and water pollution control. These are fields where joint government industry planning and programs can be fruitful in helping mankind, making use of the scientific and engineering resources of defense industries, and mitigating the unemployment consequences of future cutback in defense production. I am not forecasting a major decline for the defense industry, for we are coping with changing international conditions social and economic problems at home, a re-evaluation of our goals in

continued.....

space, and perhaps even a reassessment of the best way to achieve national security. It is obvious that we, as a nation, cannot afford to create a maginot line that might be adequate today but would collapse under new technology tomorrow. Our strength cannot be stactic. We will have to search for the means to continually improve delivery, warning and inspection systems, and the capabilities of our defense companies will still be called upon to give us the answer. I know these corporations are here to stay - profitably, productively, and constructively. But some of their activities will be devoted to related or derivative versions, new applications and new markets. But, we must face now the requirement of wisely planned industrial adjustments. No one, Republican or Democrat, favors pyramiding arms spending just to keep men at work or wasteful unnecessary defense production just to keep factories humming. With over 1 - 2 million Americans working in United States defense plants, we cannot permit lack of advance planning to cost any man his job or any plant its opportunity to contribute to the national productivity in both defense or non-defense areas. I have always been a believer in self-help.

Where a nation faces a problem of such magnitude, with such implications for both our security and economic well-being, it would be short sighted, indeed, for the federal government not to lend it's support when needed, in the favorable solution of this problem.

I do compliment the intelligent corporate leaders of our major

continued.....

defense companies who have recognized the necessity for diversification into commercial areas, and where ten per cent of the country's gross national product, nine per cent of its total work force, over half the Federal budget, over 60 per cent of the nation's scientists or engineers are directly or indirectly involved in defense and defense-related spending, you will agree that the importance to you, to your government and to the people of the United States demands attention and demands it now.

My close friend, Senator McGovern of Southern Dakota is a prominent backer of a bill to set up a national conversion commission. He, however, believes in the process of self-help and favors planning by the companies themselves. I am a firm advocate of joint government industry planning and have found wide acceptance of our administration's proposals for action now. According to the Small Business Administration, there are over 300,000 small companies (500 or less employees) who depend upon defense work for their existence. These companies and their workers need the coordinated efforts of both industry and government to help solve their problems.

What I would like to see done <u>now</u> is:

(1) A warning system organized to pinpoint what geographic areas, industries and individual plants could be affected, what the manpower cuts would be, and when the impact would come.

(2) Federal offsetting actions such as a tax cut, public works programs civilian research, manpower retraining, and loans to industry.

continued.....

(3) The organization of a coordinative group to mesh Federal State, local and industry - labor programs.

The President's Council of Economic Advisors has suggested action along these lines and I am 100 per cent in favor of these necessary steps.

We, in the service of our country, face the future, of the defense industry and the defense of America with confidence, knowing there are many problems to be met, but sure that we have in our possession the human and financial resources to solve them. Any industry which can send a man to the moon can send a man to a job.

Any industry which so quickly provided the free world with the weapons to win a war against our enemies can just as quickly provide the leadership to win a war against unemployment.

And any nation which rests its hopes and its fears, its national security and economic prospect, in this industrial complex will, I am certain, not be let down. The record proves it!

Speech material
5D-Disarm.

COPY

November 2, 1964

Bernhard G. Bechhoefer, Esquire
1710 H Street, N. W., Fifth Floor
Washington 6, D. C.

Dear Mr. Bechhoefer:

Thank you so much for your statement on "Disarment Negotiations and Our National Security." It was quite helpful to us in preparing general position papers for Senator Humphrey during the campaign.

I know he appreciates very much your taking the time to bring this material to our attention.

Best wishes.

Sincerely,

John G. Stewart
Research Director

Law Offices
Scharfeld, Bechhoefer, Baron & Stambler
5th Floor, 1710 H Street, N.W.
Washington 6, D.C.

Telephone
298-6030

Arthur W. Scharfeld
Bernhard G. Bechhoefer
Theodore Baron
Arthur Stambler

October 16, 1964

Mr. John Stewart
Office of Senator H. H. Humphrey
The Senate Office Building
Washington, D. C.

Dear Mr. Stewart:

At the suggestion of Senator Humphrey I am enclosing a "foreign affairs statement" entitled DISARMAMENT NEGOTIATIONS AND OUR NATIONAL SECURITY. I hope that it will be helpful.

In this statement I have not referred to Goldwater by name; however, the reference to ultimatums in the Hungarian Revolution -- as well as the reference to extremism -- obviously come from his speeches.

While my work in international affairs since leaving the State Department six years ago has been heavily concentrated in the field of disarmament and arms control, nevertheless I am closely in touch with a number of our international problems. If it were useful I should be in a position to furnish statements on a number of topics.

Sincerely,

Bernhard G. Bechhoefer

Bernhard G. Bechhoefer

Encl.

DISARMAMENT NEGOTIATIONS AND OUR NATIONAL SECURITY

Ever since the end of the Second World War the United States, regardless of the party in power, has been carrying on negotiations with the Soviet Union and other powers in an effort to limit the arms race. The fundamental objective of all of these negotiations is the security of the United States. The military strength of the Soviet Union is so vast that it is difficult to visualize security for any portion of the free world in the absence of security for the United States.

Before the development of nuclear and thermonuclear weapons, it was possible to obtain a high degree of military security for the United States solely by strengthening our weapons systems. Then, theoretically we might have developed our weapons systems to a point where without endangering our security we could have indulged in the luxury of sending ultimatums in a Hungarian Revolution or any other revolution in order to assist the fight for freedom from Soviet imperialism. In the world of today our military strength alone will not shield us from destruction in the event of nuclear war. We have to be careful about our ultimatums. We cannot count on the Soviet Union because of its fear of the horrors of nuclear warfare withdrawing from positions of strength, any more than the Soviet Union can count upon the United States yielding to its attempts at atomic blackmail. The time is past when any nation can insure its security solely by increasing its military strength and throwing its weight around to accomplish its international objectives.

The United Stated while maintaining its military strength must therefore look to other means for ensuring its security. One of these other means would be the effective limitation of the arms race. We have no illusions that a bare naked agreement to limit or reduce all armaments without assurance of Soviet observance would in any way strengthen our security. Ever since the Second World War we have successfully opposed Soviet attempts to create world sentiment for such meaningless gestures.

However, in the world of today, we have found some areas where the Soviet interests coincide with our own interests. The Soviet Union and the United States have a common interest in avoiding a situation where a large number of additional states would have extensive nuclear establishments. Specifically, the Soviet Union seems as anxious as the United States to prevent the Chinese Communists from becoming a major nuclear power. Also the Soviet Union and the United States seem equally desirous of avoiding a situation where a nuclear war might arise contrary to the intentions of either country -- such as a mistake in reading radar screens. All nations -- and that includes the U.S.S.R. -- are likely to abide by agreements in their mutual self-interest.

Then some agreements for arms control are of such a nature that we could immediately detect a violation by the Soviet Union and could take timely action to prevent any prejudice to our position as a result of the violation. The limited test ban treaty is an example of this latter type of agreement. Additionally, this treaty seems to be mutually beneficial to both Soviet Union and the United States in that it hinders even if it does not absolutely prevent additional nations from developing nuclear weapons.

The Hot Line between Moscow and Washington reduces the chances of war through miscalculation.

Both of these agreements are riskless to us and increase our security. There are other similar areas directly and indirectly related to the arms race where agreements with the Soviet Union are in the interests of both countries. Thus, negotiation of agreements for arms limitations and arms control is a means for increasing United States security and, indeed, the security of the entire free world.

The attainment of such agreements depends upon moderation by both sides. We in the United States realize that if the Soviet Union takes an extremist position against our fundamental interests we shall not back down even though the alternative may be nuclear destruction. If, on the other hand, we take what the Soviet Union considers an extremist position threatening its fundamental interests, what right have we to assume that the Soviet Union will be more moderate, less extremist than we and will back down? The only way to avoid nuclear destruction is for both sides to avoid extremism and practice moderation.

President Kennedy and President Johnson have mobilized some of our best diplomatic and military and scientific talent to explore this highway of arms limitation leading towards a greater national security. We have moved forward and can move forward much farther. We should not reverse our course.

Law Offices
Scharfeld, Bechhoefer, Baron & Stambler
5th Floor, 1710 H Street, N.W.
Washington 6, D.C.

Telephone
298-6030

Arthur W. Scharfeld
Bernhard G. Bechhoefer
Theodore Baron
Arthur Stambler

October 16, 1964

The Honorable Hubert H. Humphrey
The Senate Office Building
Washington, D. C.

Dear Senator Humphrey:

Thank you for your letter of October 7. In accordance with your suggestion I am sending today to Mr. John Stewart a statement covering one aspect of our foreign affairs. I should be glad to furnish either additional material on the subject of this statement -- arms control -- or on other foreign affairs subjects if this would be helpful.

Sincerely,

Bernhard G. Bechhoefer

cc: John Stewart

VF: Disarm

LAW OFFICES
RAUH AND SILARD
1625 K STREET, NORTHWEST
WASHINGTON 6, D. C.

JOSEPH L. RAUH, JR.
JOHN SILARD
DANIEL H. POLLITT
HARRIETT R. TAYLOR

737-7795

November 16, 1964

Feld advised verbally against sending letter - Not sent - J

Mr. John Stewart
Legislative Assistant
to Senator Hubert H. Humphrey
Room 1313, New Senate Office Bldg.
Washington 25, D. C.

Dear John:

Is it all right for Feld to send this letter?

Please advise before Thanksgiving.

Sincerely,

John Silard

Enclosure

DRAFT

The President
The White House
Washington 25, D. C.

Dear Mr. President:

In reviewing the assignment of responsibilities to Vice President Humphrey we urge you to consider his unique competence and experience in arms control and disarmament matters. Mr. Humphrey was certainly the acknowledged Senate leader in this area of critical national and international importance.

Within the Government chief review responsibility over arms control is vested in the "Committee of Principles"; it is presently chaired by Secretary Rusk, who we believe would willingly relinquish this burden. As Chairman of the Committee of Principles, Vice President Humphrey would be in a position to give increasing emphasis to our hopes for achieving arms control measures to halt today's frightening race toward worldwide nuclear anarchy.

Sincerely yours,

Bernard T. Feld
President

March 9, 1965

MEMORANDUM ON ARMS CONTROL

The Need

Progress on arms control is an urgent necessity in the next several years. This period will very likely tell the story on whether or not there is to be widespread and irreversible nuclear proliferation. With India and several other countries on the threshold of a decision to develop nuclear weapons, preventive action by the US and other nuclear powers is essential.

Likewise, the arms race in strategic delivery systems has reached a pause, so far as the US is concerned, and the further procurement of offensive missile systems has been temporarily halted. However, in the absence of any agreements between the US and the USSR, the race will inevitably move into its next phase, with the installation of anti-missile defense systems and responding mutual buildups in offensive missiles. Measures must be taken now, not only to prevent this development, but also to indicate to the non-nuclear countries that the nuclear powers are restraining their weapons developments and thus to demonstrate to these countries that the US recognizes the futility of nuclear arms races.

Other measures are also needed. With the growing erosion of the existing alliances in Europe, other forms of European security arrangements must be sought, preferably involving stabilizing agreements between East and West. In addition, there are incipient arms races in a number of the developing areas, and the US should be giving greater attention to the possibility of limiting these through a variety of cooperative arms control measures. Lastly, the application of arms control thinking to the Viet-Nam problem is long overdue.

Government Organization for Arms Control

In spite of the urgent need for action, arms control in the US Government today is moribund. No new policies are being suggested, and there is no discussion between the interested agencies looking toward new initiatives. Difficulties exist both in the interagency machinery and within the Arms Control and Disarmament Agency, which is responsible for initiating and developing arms control policy.

1. Interagency Problems

Although the Director of ACDA formally has direct access to the President, in practice he has not made use of this channel but has preferred instead to work through the Secretary of State. The Secretary, because of the press of other matters and his personal inclinations, has not chosen to give arms control considerations the weight they deserve. The result has been nearly-complete governmental stagnation on such issues as a world-wide non-proliferation agreement and strategic force limitations. As for the Defense Department, in a number of recent instances the DOD has ignored or directly bypassed ACDA in actions having a direct relevance to arms control, and ACDA has not been informed of recent DOD cutback plans so that these could be fed into US arms control policy.

Unfortunately, there has also been an absence of direction from the White House. Because of the very weak position of ACDA and its inability to shift the views of the State and Defense Departments, progress on arms control will be possible only if there is clear direction from the White House. It will be necessary for the President to make clear that he wants action in such areas as non-proliferation and measures to limit the strategic arms race, and it will be necessary for him or other members of the Executive Office to keep a close watch on interagency developments. In the absence of this, short-term parochial interests will defeat arms control considerations in almost every case.

2. ACDA

The Arms Control and Disarmament Agency lacks the internal machinery and personnel to develop the kind of realistic, forward-looking proposals which are needed. The internal structure of the agency prevents any rational process of policy development, and most of the experienced, capable personnel who were once with the agency have now left. To the extent that substantive responsibility for new arms control measures lies anywhere within ACDA, it resides in two bureaus headed by an ambassador and an Air Force lieutenant general, neither of whom is noted for his interest in arms control.

If new policies are to be forthcoming, one of two courses must be followed: Either ACDA must be directed to develop new arms control initiatives, with the assistance of other agencies, and experienced, motivated personnel should be provided from these other agencies, where necessary; or the White House must take a direct hand through a special staff assignment or an interagency task force. As noted above, ACDA is not performing its policy formulation function, and it lacks prestige and influence within the government. The first path does not therefore seem very hopeful for the near future, and direct White House participation seems mandatory.

Minnesota
Historical Society