

## PEACE AND DISARMAMENT IN THE SPACE AGE

Speech of Senator Hubert H. Humphrey delivered before Institute of Arms Control for World Security, Fairleigh Dickinson University (Teaneck, New Jersey), February 19, 1958

The past several months have been a period of serious stock-taking by the people of the United States. The breakdown of disarmament negotiations last fall in the United Nations deeply troubled men of good will who hoped that control of armaments might open the door to a lasting international peace. At the same time the launching of the Sputniks by the Soviet Union and the Explorer by the United States added a complex new dimension to the already difficult problem of restoring harmony to relations among nations. This dramatic scientific breakthrough raised many disturbing questions in our minds.

"What is the meaning of these new space objects for the future? Are they portents of some great catastrophe, or are they the harbingers of a new era that could bring untold benefits to mankind? Are the artificial satellites simply forerunners of more deadly weapons of war, or are they instruments that could facilitate attainment of lasting world peace?" I have searched my own mind and soul for answers to these fateful questions.

Tonight I shall attempt to outline some of the approaches which seem to me to be appropriate for easing the international difficulties besetting us. After discussing the effect of the Sputniks upon our defense preparedness, I shall suggest various means for relaxing tension between us and the Soviet Union, then discuss some of our disarmament proposals, and finally analyze the impact of recent advances in space science upon world peace and the future of mankind.

### EFFECT OF THE SPUTNIKS

The first lesson of the sputniks was an immediate and obvious one. The sudden shock of their launching, with all the implications this held for the progress of Soviet military technology, propelled us into a speedy reevaluation of our defense policies and a reexamination of our education and science. The Senate Preparedness Subcommittee, under the eminent leadership of Senator Lyndon Johnson, in a comprehensive and searching review of our defense posture, has now pointed the way to plugging the gaps and making good the shortcomings in our national military security. The American people are prepared to equip themselves as necessary to deter aggression, or to defend themselves effectively if -- God forbid -- they should ever suffer armed attack. Education and science are additional target areas for necessary improvement.

OUR GOAL: PEACE, NOT MUTUAL TERROR

Yet even when we have done all this, strengthened our defenses and reinforced our education and science, our nation and the world will still be precariously teetering on the edge of an abyss, prevented from falling over only by an uncertain balance of mutual terror. This uncertain balance could be tipped at any time by a gambling dictator, by the uncontrolled spread of a brushfire war, or by some mistake of a minor military officer. Surely mankind is capable of preparing for itself a better future than this.

Necessary as the race for survival might be, the prize for which we are striving is not an elusive military balance that at any time might erupt into war, but a system of international harmony that can assure us a viable peace. This is the goal we must hold constantly in view even as we renovate our military machine. As the Chairman of the Senate Preparedness Subcommittee recently stated so well on the floor of the Senate:

. . . our plans for peace must progress jointly and must be as firm as our plans for defense. In other words, this must be a joint effort . . . We must not spend all of our billions of dollars and make all of our plans to fight a war which may never be fought. But in preparing our Nation and in purchasing the implements, the missiles, the plans, and the submarines which may be necessary to prevent a war we should also have some positive, affirmative plan for peace . . .

The mighty devices of modern war -- the fiery H-bomb, the continent-spanning missiles -- terrible as they are, can also be given a function of peace. The H-bomb, as had been recently announced, can be magnetically bottled to supply energy-giving power, and huge rockets hold a promise of space flight that can open up a whole new epoch for mankind. The works of war can be turned into works of peace, provided we have the will to make them so.

THE NEED FOR A START ON DISARMAMENT

While our works of peace must be many, one of the most urgent is to achieve some progress on disarmament. As Chairman of the Senate Subcommittee on Disarmament I can assure you, ladies and gentlemen, that the United States Senate is acutely aware of the urgency of the disarmament problem. The Members of the Disarmament Subcommittee, a bipartisan group drawn from the Senate Foreign Relations and Armed Services Committees, and the Joint Committee on

Atomic Energy, have energetically dealt with this question. The unanimous report issued by the Subcommittee last summer, I think, is a model of bipartisanship at its best. While this report is not the final word of the Subcommittee, it indicated broad outlines on which it thought United States disarmament policy should be based.

Efforts to diminish the threat of war, the Subcommittee Report stressed, would require progress on settlement of outstanding political problems between the Kremlin and the West and an endeavor to curtail and control armaments. It cautioned, however, that there should be no condition requiring a settlement of all political problems before making a start on disarmament. Otherwise, we might wait forever. A limited advance toward disarmament now could melt away some of the tension that congeals the atmosphere between the communist bloc and the West.

#### DEADLOCK IN NEGOTIATIONS

Thanks partly to the stiffening effects of the Sputniks the "cold war" freeze is now at a low temperature. United Nations talks have broken down and the Soviet Union vows it will not return until all the rest of the United Nations agrees to the Kremlin's version of a reconstituted Disarmament Commission. Both the United States and the Soviet Union, despite their respective demands for diplomatic negotiations and a "Summit Conference," seem reluctant at the moment to conduct negotiations on any government level higher than that of the Post Office. How the cause of peace can be advanced in an atmosphere of such stubbornness, mistrust, and suspicion, the anxiously waiting world does not know.

#### NECESSITY OF IMPROVED ATMOSPHERE

Negotiations must be resumed, and I think it is only a question of time before they will be. The Kremlin is casting about now for a face-saving retreat from its hitherto unbending position, and the United States is softening its hard preconditions. But even if stubbornness should give way and diplomatic communication between Moscow and Washington be restored, mistrust and suspicion will still remain. It will be an arduous task, and a lengthy one, to make a significant transformation in attitudes that are rooted deep in historical hates and fears and in conflicting ideologies. Yet if we are ever to make progress on the works of peace, a more conducive atmosphere must be created.

### THREATENING LANGUAGE MUST BE ABANDONED

The obligation of both the United States and the Soviet Union to help create this atmosphere is a grave one. Both countries can contribute much to clearing the air. One of the first requirements is that language, the oil of all human relations, should be lifted out of the inflammatory state into which it has fallen. Threat and bluster must be discarded as an ordinary medium of communication between Moscow and the West. The salvo of threats which Nikita Khrushchev has directed at other nations within the past year is warmongering and sword-waving at its worst. The threats of massive retaliation and of nuclear devastation upon Peiping and Moscow that have emanated from Washington, while I am sure they have not been motivated by aggressive intent, nevertheless do not act as a sedative upon the international nervous system. This belligerence of language should stop. Tension cannot be eased in an atmosphere that is constantly charged with threats of violence and reprisal.

### THE PROBLEM OF MISTRUST

The problem of mistrust is also deep-seated. The Kremlin's record of dishonoring its pledged word is a dismal one. Again and again I hear people castigate any thought of entering into agreements with the Soviet Union because it has violated so many of its agreements in the past. Yet despite the lack of respect for its bonded word which Moscow has shown time and again, I do not think we should continuously concentrate on this fact in order to justify a completely negative attitude on our part. Of course, even the Soviet Union keeps some of its agreements -- for instance, the Peace Treaty of 1947 with Finland and the Austrian Peace Treaty. The key to making effective agreements with the Soviet Union is to confine them to those situations where a violation would immediately become known and cause no significant harm.

### PRUDENCE NECESSARY IN NEGOTIATING WITH COMMUNISTS

The state of the world is too critical for us to draw back from the Soviet Union in self-righteousness and exclaim, "I will have no dealings with you because you're a slippery and immoral character." That might appease our pride and perhaps shield our hopes from disappointment, but it will hardly bring peace any closer or calm the fears of the many millions who must inhabit the same earth with two quarrelling superpowers. What our experience of the faithlessness of the Soviet Union has taught us, is that we should exercise prudent caution in negotiating with the Communists.

In regard to disarmament that means we should not jeopardize our security by putting our signatures on any agreement depending on good faith alone for its fulfillment. Adequate inspection must be provided for wherever appropriate to detect immediately any violations or evasions. Consequently, I do not see how the security of the United States could be endangered by an agreement on such terms.

#### PERSONNEL EXCHANGES WILL FOSTER TRUST

The factor of trust is particularly important in our relations with the Russian people. I heartily commend the recent agreement for exchanges of persons between the United States and the Soviet Union. Reciprocal visits such as these can tear away curtains of falsehood and misunderstanding and inject warmth and friendship on the people-to-people level. Indeed, I would encourage anyone from behind the Iron Curtain to come to our country on a visitor's visa and American tourists should also be encouraged to visit the Iron Curtain countries. Through a generous interplay of contacts I think we could wipe away some of the distortion constantly fed into the captive Soviet audience by the press and other mass communications media directed by Moscow.

#### DIPLOMACY MUST BE FLEXIBLE

In all of our negotiations with Moscow we must have flexibility and an optimistic persistence. Every policy we formulate on any subject must periodically be reappraised to see if it harmonizes with evolving conditions. That does not mean we should repeatedly pull up the potatoes to see if they are still growing. It is a familiar tactic of those who do not like a particular policy to harp on the necessity of "reviewing" it or "reexamining" it, in the hope that they can thus undermine it. In my view, if a policy is working, I say "Let it work!" But there are times when policies don't get anywhere, and I see no point in trying to ride a dead horse. When one policy has been given a reasonable trial without success, then we should search for an alternative. To maintain that because a policy was valid five or six years ago it must be valid today is pure nonsense. It may or may not be valid depending on current conditions. Our mentalities have got to be flexible enough to adjust to evolving reality. The age of a policy or the character of the person or administration which originally sponsored it have little or nothing to do with its present validity. It must be judged on its merits and in the light of current developments.

DIPLOMACY MUST BE POSITIVE

Moreover, a basic operating principle is that all the negotiating governments should have a positive attitude. No government, least of all the government of the United States, should be negative about the possibility of limiting the arms race. To devise proposals that have no chance of acceptance is to engage in propaganda and not to make a serious effort to further the cause of disarmament and peace. Proposals of the Soviet Union should not be lightly or impatiently brushed aside, even when they are exasperatingly rigid or unreasonable. The densest armor has chinks and it is the task of statesmanship to find them.

PERSISTENCE CAN PAY OFF

We have been dealing with the Soviet Union long enough now to know that negotiating with them is a persistent chipping away process. Someone has called negotiating with the Communists "seat of the pants" diplomacy. It is often just a question of who can out-sit or wear down the other at the conference table. But persistence can and does pay off. Negotiations for the Austrian Peace Treaty required 8 years and some 400 meetings, but we did get a peace treaty. The Korean armistice negotiations required almost 600 meetings over a period of two years. While the result was imperfect, nevertheless aggression was thwarted and the fighting was ended. So if we approach the Soviet Union with a positive attitude and with rugged determination, there is some reasonable expectation that our endeavors can be crowned with success.

DISARMAMENT PACKAGE MUST BE BROKEN UP

But no matter how persistent we are we cannot expect the Soviet Union to accept what is totally inconsistent with its character. We cannot ask the impossible. The present disarmament proposals of the United States consist of a package that includes prevention of surprise attack by aerial and ground inspection, suspension of nuclear arms tests, ending nuclear production for weapons, reduction of armed forces and armaments, study of controlling outer space vehicles, and study of regulation of the arms trade. This complex package of proposals has been euphemistically referred to as a "first step," but frankly, ladies and gentlemen, to expect the Soviet Union to accept far-reaching proposals such as these as a "first step" would be like expecting a baby to take its "first step" two days after birth. It is just asking too much. As I said in the Senate three weeks ago, "No nation least of all the suspicious, tightly controlled Soviet Union would agree to such sweeping provisions all at one time. The

most important points in the United States disarmament package require the installation of elaborate inspection systems. Do we really expect the Soviet Union to open up its country to the extent of foreign inspectors in all atomic energy plants, all test sites, all major communication centers, all ports, airfields, all depots to mention only the most important inspection points in our proposal? And would we be ready to reciprocate if the Soviet Union were to surprise us by accepting the proposal?"

Since it would be excessively optimistic to press for agreement on our total disarmament package all in one shot, I suggest that the package be broken up into small parcels and presented as separate proposals. There are two ways this can be done which I would like to suggest here tonight.

#### SUSPENSION OF NUCLEAR TESTS

In regard to our two main proposals on nuclear weapons it would be significant if either one could be embodied in an agreement. I refer to the proposal for suspension of nuclear weapons tests and the proposal for suspension of nuclear weapons tests and the proposal for termination of the production of fissionable material for weapons purposes. I believe that public opinion in the United States and throughout the world would support the suspension of nuclear weapons tests provided an adequate inspection and detection system could be installed in all testing countries and near all test sites in such a manner as to reliably bring any test under surveillance. A suspension of tests would retard and I would hope prevent the spread of production know-how for nuclear bombs and warheads to other countries. Otherwise, the day will be inevitable when these lethal devices will come into many hands which by accident or irresponsibility might trigger off an Armageddon.

A test ban would freeze or retard nuclear weapons development in those countries which have produced nuclear weapons -- the United States, the Soviet Union and Great Britain. It would prevent or at least greatly hinder development of nuclear weapons by other countries. Freezing nuclear weapons development at its current level would constitute no threat to the security of the United States inasmuch as we have been assured that we are ahead of the rest of the world in this aspect of weapons technology. In view of the energy with which the Soviet Union has been calling for a separate ban on tests of nuclear explosives, we at least should test them to see if they are willing to do what is necessary to make a test ban effective or if they are just perpetrating a propaganda hoax.

BAN ON NUCLEAR PRODUCTION FOR WEAPONS PURPOSES

The imposition of a ban on test nuclear explosions for development of weapons would put a checkrein on the spread of the nuclear arms threat. To this extent it would be advantageous to the cause of world peace, but it is not the heart of the nuclear weapons problem. Stockpiles of nuclear bombs, shells and warheads could still continue to grow. For that reason I agree with the President that a cut-off in the production of nuclear material for use in weapons should be vigorously pursued. It has never been made clear to me, however, why the President insists a nuclear production cut-off should be linked with a nuclear test ban as well as the many other proposals in our disarmament package. It is apparent that the Soviet Union fears the inspection system that would be necessary to verify a termination of fissionable production for weapons purposes. However, outlawing of nuclear production is so essential in order to put a ceiling on the amount of nuclear ammunition available to potential belligerents that our negotiators should press harder to get Khrushchev and his comrades to accept this method of ameliorating the nuclear war threat.

PROPOSAL FOR INSPECTION OF PRODUCTION CUT-OFF

Admiral Strauss, the chairman of the Atomic Energy Commission, has conceded the feasibility of installing an inspection system to check and verify an agreement forbidding further nuclear production for weapons purposes. But as far as I know the details of inspection either for checking on a production cut-off or for verifying a ban on nuclear tests have never been worked out. Without waiting for conclusion of an international agreement to do either one of these two things, the United States should forthwith appoint two groups of experts, one commissioned to elaborate an inspection system for a test ban and the other to work out regulations and controls for a production cut-off. These two groups should offer to meet with similar bodies from the Soviet Union to see if in unison they might contrive suitable inspection systems for these purposes, with no necessary commitment by either side as to whether they will be accepted or rejected.

The problems of the nuclear age have now been with us for a dozen years, and although we have solved some of them, we have scarcely made a dent in the central problem of whether we can control this vast new force sufficiently to prevent it from destroying us. Although I have outlined approaches which I think could reduce the danger of atomic annihilation, these processes will take time. Even if they should bear ripe fruit they would not eliminate the nuclear war menace altogether because there is now no practical way of controlling already existing nuclear explosives stocks by means of reliable inspection. It will then be necessary to reduce nuclear weapons stocks by a plan of transfer of nuclear materials to peaceful uses.

### THE ADVENT OF THE SPACE AGE

The transition from the pre-atomic to the atomic age which was suddenly thrust upon us in 1945 struck us all with a sense of witnessing one of the major turning points of history. Here was an evolution comparable to that from the Stone Age to the Iron Age, or from the agricultural age to the industrial age. Few of us ever dreamed that within a dozen short years, man would make another transition of perhaps even greater historical moment -- the leap from the terrestrial to the space age.

Since the dawn of human history man has been identified with the earth -- on the earth he has lived and from the earth he has drawn his sustenance and shelter. Between the earth and the heavens, between the world and the universe was a huge unbridgeable void which men did not seriously think of crossing except on flights of imagination. But now almost overnight steps into the great ocean of space have been taken and men have it within their reach to leave the earth physically for other worlds. While many technical problems must be solved before the first man actually can escape the attraction of the earth's gravity on an expedition into the outer universe, nevertheless the earth satellites whizzing overhead warn us that the practical political problems of the space age are already upon us.

### THE MORAL PROBLEM OF THE SPACE AGE

The most serious problem which mankind has to face as it crosses the threshold of the space age is not a technical, but a moral one. Man is divided against himself. Torn by ideological differences, jealousies and suspicions, the human race looks into outer space in conflict with itself. We meet here tonight in celebration of "brotherhood" but unfortunately there are many humans in this world whose whole philosophy of life is based on the instigation of conflict among men. For them brotherhood is not a principle of harmonious living, but a class slogan to arouse hate and to win privilege for one group of human beings against another.

Are we to carry these hostilities with us as we move into outer space? There was a kind of parallel to the present situation in the great age of discovery and exploration beginning in the fifteenth century. Then the major European powers expanded over the continents of America, Asia and Africa and carved out for themselves great colonial empires. The rivalries and jealousies of the nations at that time led to bloody wars among the British, the French, the Spanish, the Dutch, and others, in which the domination of the new lands was settled by the musket and the swinging cutlass rather than peaceful cooperation. In those days men could afford the luxury --

if we may call it that -- of a certain amount of warfare because the destructiveness of weapons was relatively limited. But in the space age weapons are so tremendously destructive that military rivalry over control of space could be sheer suicide. If in the mid-twentieth century man is to master new worlds, the venture will have to be a joint one or the ensuing anarchy might inter man in his earth before he ever get a chance to leave it.

#### THE PROBLEM OF SPACE LAW

There are immediate as well as long-range problems posed by the space age. Practically all of them involve a choice, as Bernard Baruch once so aptly put it, "between the quick and the dead," between peace or mortal conflict. One of the most immediate is the problem of "space law." Even now Sputnik II and the Explorer are traversing space over countries which have traditionally asserted sovereign authority in the areas over their national territories. It would obviously be absurd for each nation to assert a claim stretching out infinitely over space and the universe from its own sovereign territory. Somewhere there has to be a boundary between sovereign space and non-sovereign space. Moreover, although the space satellites now orbiting around the earth are instruments of science, it is only a question of time before reconnaissance satellites, communications satellites and missile-guidance satellites and space platforms will be sent aloft that could be adapted to military ends. Are individual states to have full freedom to send instruments of war such as these flying through space over other countries, perhaps for hostile purposes? Are these instruments of war to have the same freedom of travel and access as instruments of science and peace? Should, for instance, freedom of space be proclaimed in exactly the same manner as freedom of the seas? These complex questions should be settled soon, or disorder and confusion, and even conflict, could result from rapidly progressing space developments. My first proposal for dealing with the problems of the "space age" is that the United States should immediately sponsor in the United Nations a study of the question of bringing space travel and communications under an international legal order and regulation.

#### CONTROL OF BALLISTIC MISSILES

While the elaboration of international space law could eliminate certain possibilities of conflict among the nations, it will not in itself be a system of space disarmament, any more than the international legal principles governing travel on the seas are a guarantee of a disarmed peace. Nations will still be able to carry on their programs for such outer space vehicles as inter-continental ballistic missiles unhibited by an international restraint.

Although the perfecting of these swift death-dealing rockets is already far advanced, there is still time to take action to bring them under control. But promptness is of the essence. The world lost a unique opportunity to harness the atom solely to peaceful purposes in the years right after World War II when the Soviet Union spurned the United States offer and the United Nations plan for international management and regulation of the production and use of fissionable material. Due to Soviet non-cooperation the world must now suffer the pangs of an uncertain mutual nuclear deterrence. It would be folly to make the same kind of mistake twice. We now have an opportunity to forestall the threat of long-range ballistic missiles by cutting off their development before they become fully grown and proliferate to such an extent that chances of control will be practically nullified. Once operational ICBM's exist in quantity and their fuel and launching systems become so refined that missiles and their launching sites become readily concealable, chances for effective control might have vanished.

My second proposal for the "space age" is that all missiles and outer space vehicles should be placed under international surveillance to insure that no clandestine tests of rockets or other outer space devices are conducted for military ends. The United Nations would be the proper framework under which to lodge responsibility for this task. As long as long-range missiles have not reached a state of perfection, detection methods, I am given to understand, could be relatively simple. Test firings are necessary to bring these missiles to maturity and since these rise to great heights and travel great distances long-range radars now under development in all probability could fulfill much or all of the surveillance function.

Difficulties would be compounded, however, if inauguration of an inspection system should be delayed until the long-range missiles were perfected, for then multiplication of their numbers could proceed without field tests. Location and inspection of factories would then be necessary to discover illegal production.

Time is already growing short and I consider it necessary to get a program underway as soon as possible to work out the details of a control and inspection apparatus to prevent long-range ballistic missiles from adding to the threat that nuclear stockpiles already hold for the world. The United States should urgently pursue its proposal to create a joint study commission with the U.S.S.R. to devise machinery that can insure that no tests of long-range missiles are conducted for weapons purposes.

INTERNATIONAL COOPERATION FOR SPACE RESEARCH AND EXPLORATION

My third proposal for the "space age" is that, as a separate and independent project, the United States should take the lead in marshalling the talents and resources of the world to unlock the mysteries of outer space in joint research and exploration under the auspices of the United Nations. The cooperative endeavor of the International Geophysical Year has laid a foundation of experience upon which a more advanced structure can now be erected. Many nations are in a position to contribute with their science and, according to their means, with funds, to the mighty effort that will be necessary to extend man's knowledge of and to explore the extra-terrestrial regions of the universe. All nations should be invited to participate in this, perhaps man's greatest, enterprise, and no nation should be excluded. Although it is possible that some countries might be impelled by their own narrow national or ideological aims to cold-shoulder the United Nations astronautical agency at first, our experience in setting up the International Atomic Energy Agency has demonstrated that joint undertakings of this character for world peace and welfare exert a magnetic force compelling even the reluctant to participate. While establishment of an international space research and exploration agency such as this would be separate from the proposal for banning development of military long-range missiles, it too would have value as a disarmament device for it would absorb energies and divert resources that might otherwise be expended in military rivalry or for further amassing missiles and other kinds of space weapons.

A RECONNAISSANCE SATELLITE FOR PEACE

Moreover, the United Nations outer space agency could contribute to disarmament in a more direct and positive way. One of the first projects it should sponsor -- and this is my fourth proposal for the "space age" -- is a priority program for a reconnaissance satellite. Under the supervision, guidance and control of the international organization, such a satellite could cross national borders and Iron Curtains and expose to the wholesome gaze of the world military preparations of all nations. While the probing eye of the satellite might not be able to penetrate everywhere or to reveal every secret, its power of revelation should be sufficient to impress upon every government the futility of exaggerated nationalism and the unreality of expansionist ambitions. This special kind of satellite when thus used as an international instrument would be science at its best, working for humanity and peace.

BROTHERHOOD OF MAN THE KEY TO PEACE

These many complex problems posed by the atom and by space make us realize we stand at a critical point in world history. These new scientific and technological discoveries threaten to outrace man's capacity to cope with them. The tremendous forces which have been unchained in our laboratories -- the splitting or fusion of the atom, and the means of space flight -- have potentialities either for the welfare or detriment of mankind. Whether they will be employed for good or for ill depends upon man and upon man alone. It is his choice which will decide.

The central problem of our age is whether man can learn to live in harmony with himself and at peace with his fellowman, whether all men can learn to apply the age-old lessons of brotherhood which are the only genuine warranty of peace. In the imperfect world in which we live adequate military defense for our country is a necessity, but we cannot become so engrossed in military preparations that they dominate our policy. Beyond the imperative of defense is the imperative of peace. Beyond the guns, and the missiles and the nuclear bombs are the aspirations of our own people and of the peoples of the world for a fuller and better life. The fulfillment of these aspirations is the real aim of our policy and the ultimate reason why we seek to control the instruments of destruction that now cast their dark shadows over us. This is the message that we must carry to our fellowmen and implant firmly in their minds and hearts. For it is only in the brotherhood of man that we can bring peace to the earth and to the opening universe.



# Minnesota Historical Society

Copyright in this digital version belongs to the Minnesota Historical Society and its content may not be copied without the copyright holder's express written permission. Users may print, download, link to, or email content, however, for individual use.

To request permission for commercial or educational use, please contact the Minnesota Historical Society.



[www.mnhs.org](http://www.mnhs.org)