

In the absence of an international agreement an alternative possibility of preserving peace, which is, I think, fully justified in the short term view by considerations of expediency and practicability, as well as of necessity, is that the present paramount ascendancy in this field, which is now held by peace-loving and democratic nations, and in largest measure by the United States, should be continued and increased by every method which is open. The very progress which is made by these nations will be a strong inducement to other nations to join in the project for international control so that they may share in the benefits.

SCIENCE UNIVERSAL

There can, of course, be no continuing monopoly in the facts of science; what one nation has found out, others can learn also by the application of appropriate efforts and granted sufficient time. In truth there never have been any real scientific secrets about the atomic bomb. The whole epic history of nuclear physics has been international in character from the first detection in France of the peculiar rays given off by uranium minerals, and in between these great events there have been very substantial contributions to knowledge from almost every country engaged in scientific research.

While I make the point that there are no real scientific secrets yet there are most important technological advantages and engineering know-how which are the exclusive prerequisite of those who have laboured and carried the burden of development. I would say that in the atomic energy project, like any other major undertaking, there is a phase where prodigious effort is required for little in the way of return; then there comes a point at which the returns increase very rapidly for a little additional effort and everything goes forward on a rising curve.

The United States is today on this rising curve with atomic energy. Its leadership is now in an unquestioned position and if those concerned maintain their research and development on the scale authorized by their Congress it seems that their ascendancy will remain for a decade or so at least. Meanwhile no other country on earth has as yet passed out of the difficult first phase to which I have referred and it will be a very arduous and long process to overtake the United States lead which is presented by capital equipment in atomic plants and research establishments estimated to have cost some billions of dollars mostly in payment in one way or another for skills which had to be taken out of the national economy. No other country is as yet endowed with these skills on such a lavish basis nor is it likely that any other country could make this diversion without destroying or at the least seriously crippling their national economy.

ALERTNESS ESSENTIAL

In the light of what I have said as to the great magnitude and long continued efforts required for the preparation of atomic war, it seems reasonably probable that we need not fear its outbreak on any significant scale for a while yet. There is thus no occasion for hysteria but on the other hand it would be folly to waste the time which remains to us through a failure to give proper consideration to the defensive measures which are open and in particular to advance by every means within our power the setting up of an international agreement which will effectively protect the peoples of the world.

The first step towards the creation of such an international agreement was made very shortly after the termination of the war by the United States, Great Britain and Canada, in a declaration issued at Washington on 15 November

1945, recognizing the need for an international agreement and proposing as a matter of great urgency the setting up of a Commission under the United Nations to study the problem and to make recommendations for its control.

This was followed by a meeting of the Foreign Ministers in Moscow in December 1945, at which the Washington proposals were endorsed. At the meeting of the General Assembly on 24 January 1946 in London, the United Nations Atomic Energy Commission was established by unanimous resolution.

ATOMIC ENERGY COMMISSION

The Commission, composed of delegates from each country represented on the Security Council, as well as Canada, when Canada is not a member of the Security Council, was charged with making specific proposals, among other matters "for the control of atomic energy to the extent necessary to ensure its use only for peaceful purposes", and "for effective safeguards by way of inspection and other means to protect complying states against the hazards of violations and evasions."

When the Commission first met in New York in June 1946, it was presented with two different plans for the control of atomic energy - one proposed by the United States, and the other by the Soviet Union. The United States proposals called for the formation of an International Atomic Development Authority, which would foster beneficial uses of atomic energy and would control atomic activities in all nations either by direct ownership, management or supervision, in the case of activities potentially dangerous to world security, or by a licensing and inspection system in the case of other activities. This system of control would be set up by stages and after it was in operation, the manufacture of atomic bombs would cease. Existing bombs would be disposed of, and the world authority would be given information re-