



STATEMENTS AND SPEECHES

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THE STUDY OF NUCLEAR RADIATION

Statement by Mr. Howard Green, Canadian Secretary of State for External Affairs and Chairman of the Canadian Delegation, in the United Nations General Assembly on November 17, 1959

Of all the scientific and technological achievements of recent years the unleashing of the power of the atom has undoubtedly been the most spectacular and far-reaching. Henceforth mankind must live with the atom. Already many ways in which this new force can serve man, in his pursuit of a better life, are known or are foreseeable. Yet, at the same time we must learn to control the terrifying potential of the atom for destruction.

The position of the Canadian Government on this question has already been made abundantly clear. For example, we are convinced of the need to reach agreement on the cessation, under appropriate controls, of all nuclear weapons test explosions. We hope that negotiations to this end and in the general field of disarmament will soon lead to an agreement stopping further such explosions.

However, even when this desirable result is achieved, the problem of ionizing radiation will still exist. There will continue for several years to be fallout of radioactive particles already in the atmosphere. There will also be long-term effects from the movement of radioactive isotopes through food chains. Even more important, there will continue to be for a long time genetic and biological effects from radiation, both man-made and natural, on the health of human populations.

In a manner of such concern to human life and to future generations, we believe it is vital to fill the gaps that continue to exist in our knowledge of the phenomenon of radiation. There is widespread concern that we should be able to assess more accurately than is now possible the nature and extent of the hazard resulting from the addition of man-made radiation to that which already occurs in nature.

The United Nations Scientific Committee on the Effects of Atomic Radiation, which was set up essentially for the purpose of enquiring into these questions, has done very useful work since it was established four years ago. Following its first comprehensive report, which was considered at the last session of the General Assembly, the Committee has gone on to prepare a programme of work for its forthcoming sessions. This programme appears to my Delegation to be well balanced and practical.

The Committee plans to continue its study of the physical aspects of fallout, the physical and biological problems concerning the transmission of fission products through food chains, and also the relationship between radiation dose and effects. It plans also to study genetic problems and the physical and biological problems concerned with Carbon-14, which remains radioactive for centuries.

In its work the Committee has received co-operation from many governments, from Specialized Agencies, from the International Atomic Energy Agency, from international non-governmental and scientific organizations as well as from individual scientists. It appears that useful arrangements have been worked out for co-operation between this Scientific Committee and the agencies concerned, which is a source of satisfaction to my Delegation.

However, it is clear that, notwithstanding this co-operation and the fact that the Committee has received much useful information on fallout, radiation levels and radiobiological questions from many member states, it requires more information on these questions in order to discharge its full responsibilities, and in order to make the maximum use of the scientific knowledge and skills available to it. Indeed, the Committee itself has found it necessary to invite member states to provide further data of the type already contained in its earlier comprehensive report and to suggest that this collection of information be supplemented in various other ways.

For the purpose of filling the gaps that continue to exist in our knowledge of the phenomenon of radiation, we believe the scientists should have at their disposal the fullest and most reliable information possible. This can be obtained only by the widest co-operation of member states and the international organizations concerned. We consider it important that a greater effort should be made to obtain such information and to enlist the necessary co-operation. We wish to place the authority of the General Assembly squarely behind this effort.

For this purpose my Delegation, in company with the delegations from Argentina, Austria, Czechoslovakia, Ghana, Ireland, Italy, Japan, Mexico, New Zealand and Norway, has presented the draft resolution which is contained in Document A/L 268.

In its simplest terms, what the resolution is designed to do, in addition to approving the various recommendations of the Scientific Committee, is to ask that Committee to examine the possibility of making arrangements, which I hope will be more effective, for the collection and analysis by member states of radiation samples of air, water, soil and food, on the basis of uniform standards; and also for the encouragement of genetic and biological studies of the effects of exposure to radiation.

In its examination of these questions, in consultation with the agencies concerned, the Committee may discover gaps in the technical resources of member states that would prevent them from contributing to this co-operative programme as they would like. If this should be the case, I hope that the agencies concerned will consider the possibility of extending assistance to fill these gaps.

In addition, the resolution asks member states having facilities for laboratory analysis to assist in analyzing radiation samples. The Canadian Government, for its part, is prepared to give assistance of this kind to other member states wishing to avail themselves of Canadian laboratory facilities.

We are prepared to receive from other states radiation samples collected according to methods recommended by the Scientific Committee in consultation with the appropriate Specialized Agencies, and to analyze such samples in the Canadian Government laboratories which handle Canada's domestic sampling programme. If other governments indicate their readiness to participate in such a co-operative programme of collection and analysis, the Canadian Government, as an initial offer, is prepared to receive and analyze on a regular basis samples of air, water, soil and food from 20 to 25 foreign sampling stations in each category.

Once it is known that others are prepared to co-operate in such a programme, these analyses could be undertaken within the space of the few months required to expand existing Canadian laboratory facilities and analytical staff. The Canadian Government is, of course, prepared to undertake that the analytical procedures used in its laboratories will be such as to ensure the comparability of results with those produced by other governments co-operating in a programme of this nature. We believe arrangements of this kind will materially assist the Scientific Committee in its task and we invite other governments to consider how they might participate in such a programme either through the collecting of samples or through providing facilities for analysis.

If, as we hope, there is a widespread response to our offer, as well as offers by other governments to make their facilities available, it is our understanding that the Secretariat of the Scientific Committee would be kept informed step

by step as appropriate arrangements are made between member states offering samples and those offering analytical facilities. The Secretariat would be notified of the availability of radiation samples by member states willing to collect them; it would also be notified by member states, and perhaps by the International Atomic Energy Agency, if they are able to receive and analyze samples in addition to those they have collected themselves. It is our hope that in this way arrangements between governments can be made whereby samples available for analysis are forwarded to the most convenient or appropriate laboratories. The results of the analyses would of course be communicated both to the Scientific Committee and to the country providing the samples.

In making this offer and in presenting this draft resolution for the General Assembly's consideration, the intention of the Canadian Delegation is to strengthen the Scientific Committee's hand and to authorize it to work out practical arrangements designed to secure more of the information it requires. The resolution leaves it entirely up to the Committee to decide how this can best be done and does not attempt in any way to direct or influence the Committee's scientific work.

All the suggestions in the resolution are within the terms of reference established for the Scientific Committee, which is already authorized to receive radiation data and to recommend uniform standards with respect to procedures for sample collection and instrumentation. The Committee has in fact already requested member states to co-operate along these lines.

The draft resolution before the Assembly is the result of lengthy negotiations among delegations representative of various geographical areas and political opinions. We therefore trust it will commend itself to all members of the General Assembly. It is a practical expression of what we judge to be a widespread desire that the Scientific Committee be strengthened in its work, to the end that man's knowledge of the biological effects of ionizing radiation may be as complete as possible. For this purpose it is important that the worldwide physical measurement of the intensity and distribution of radiation should be accurate and comprehensive and that research into the biological effects of radiation be based on the fullest and most reliable information.