

NUCLEAR TESTS CASES

AFFAIRES DES ESSAIS NUCLÉAIRES

**REQUEST FOR THE INDICATION OF INTERIM
MEASURES OF PROTECTION SUBMITTED
BY THE GOVERNMENT OF NEW ZEALAND**

14 May 1973.

Case to Which this Request Relates

I have the honour to refer to the Application submitted to the Court on 9 May 1973 by which New Zealand instituted proceedings against France. I have now the honour, in accordance with Article 33 of the General Act for the Pacific Settlement of International Disputes, done at Geneva on 26 September 1928, Articles 41 and 48 of the Statute of the Court and Article 66 of the Rules of Court, to submit a request for interim measures of protection to preserve the rights of New Zealand pending the final decision of the Court in these proceedings¹.

Rights to Be Protected

2. The rights to be protected are:

- (i) the rights of all members of the international community, including New Zealand, that no nuclear tests that give rise to radio-active fall-out be conducted;
- (ii) that the rights of all members of the international community, including New Zealand, to the preservation from unjustified artificial radio-active contamination of the terrestrial, maritime and aerial environment and, in particular, of the environment of the region in which the tests are conducted and in which New Zealand, the Cook Islands, Niue and the Tokelau Islands are situated;
- (iii) the right of New Zealand that no radio-active material enter the territory of New Zealand, the Cook Islands, Niue or the Tokelau Islands, including their air space and territorial waters, as a result of nuclear testing;
- (iv) the right of New Zealand that no radio-active material, having entered the territory of New Zealand, the Cook Islands, Niue or the Tokelau Islands, including their airspace and territorial waters, as a result of nuclear testing, cause harm, including apprehension, anxiety and concern to the people and Government of New Zealand, and of the Cook Islands, Niue and the Tokelau Islands;
- (v) the right of New Zealand to freedom of the high seas, including freedom of navigation and overflight and the freedom to explore and exploit the resources of the sea and the sea-bed, without interference or detriment resulting from nuclear testing.

The fact that further nuclear tests at the French Pacific Test Centre will aggravate and extend the dispute between New Zealand and France is one of the grounds on which New Zealand seeks protection of the foregoing rights. In addition and independently, New Zealand has the right to the performance by France of its undertaking contained in Article 33 (3) of the General Act for the Pacific Settlement of International Disputes to abstain from any action whatsoever that may aggravate or extend the present dispute.

¹ See p. 344, *infra*.

Grounds of Request

3. The grounds on which interim measures are sought are:

First, that the testing of nuclear devices and weapons in the atmosphere at the French Pacific Test Centre at Mururoa Atoll would prejudice the rights set out in the previous paragraph and would do irreparable damage to the interests sought to be protected; would affect the possibility of fully restoring those rights in the event of a judgment in New Zealand's favour; and would aggravate and extend the dispute submitted to the Court.

Secondly, that on the basis of the pronouncements and past practice of the French Government, and of its refusal in the recent talks to give an assurance that its programme of atmospheric testing in the Pacific has ended, there are strong grounds for believing that the French Government will carry out further testing of nuclear devices and weapons in the atmosphere at its Pacific Test Centre at Mururoa Atoll in the near future; that is to say, that such tests are likely to take place before the Court is able to reach a decision in the present case.

The Nature and Extent of the Damage Sought To Be Avoided

4. As to the first ground stated in the preceding paragraph, every nuclear test that gives rise to radio-active fall-out adds indelibly to the historical record of actions which show disregard for the rights of the international community. Testing sites are established in the less populous areas of the globe, not only because nuclear explosions are inherently dangerous, but also because they alarm and antagonize people who live within the shadow of the testing area. This alarm and antagonism, though felt most keenly at the regional level, is itself a direct response to the scientific, political and legal opinion of the world community, focused in the meetings of the United Nations and of the specialized agencies.

5. Scientific knowledge shows that the effects of ionizing radiation on living tissues are cumulative and that its genetic effects are incalculable. In the light of this knowledge, international and most national authorities (including those of New Zealand) adopt the working rule that any increase in radiation levels is potentially harmful, and must be justified by benefits received. This scientific norm is supported and extended by mankind's justified fears for his own survival, and by his awakening sense that his own activities are devastating the human environment. These perceptions are in turn the prelude to the self-discipline which finds expression in rules of law. Nowhere is this more evident than in the formation of an *opinio juris* that nuclear testing in the atmosphere is unlawful.

6. Every atmospheric nuclear explosion leaves its own trail of contamination. The recorded experience of effects produced by previous nuclear explosions at the French Pacific Test Centre leaves little room for doubt that any future nuclear explosion—however small and however well controlled—will cause radio-active debris to be deposited in the airspace of the countries in the southern hemisphere, including New Zealand, the Cook Islands, Niue and the Tokelau Islands, and in the airspace above the high seas. For reasons already explained, the harm done by such an intrusion cannot be undone. It is of two kinds: the somatic and genetic damage to living organisms; and the apprehension, anxiety and concern caused to the peoples of the countries affected.

7. The five following sections of this request add to, and expand, the points made under the present heading.

The World-wide Opposition to Nuclear Weapons Development and Especially to Atmospheric Testing

8. The maturing of international attitudes towards the development and testing of nuclear weapons is shown in the debates of the General Assembly and other organs of the United Nations and of the specialized agencies, and in resolutions, declarations and treaties adopted by these bodies. At its first session in 1946, the United Nations General Assembly called for the placing of atomic energy under international control and its conversion to peaceful uses only. When this attempt failed, international efforts were directed towards the control and elimination of nuclear weapons in the context of measures for general and complete disarmament. Against a background of continued testing and of growing knowledge and awareness of the deleterious effects of radio-active fall-out on man and on his environment, the General Assembly set up in 1955 the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) to collect and study radiological information, including information on fall-out from nuclear weapons tests.

9. In 1957 the General Assembly included in its recommendations on general and complete disarmament a call for the immediate cessation of all nuclear weapons tests. Throughout the moratorium on testing observed by the United States, the Soviet Union and the United Kingdom between 1958 and 1961, the General Assembly urged continued restraint on their part and appealed to other States not to begin testing. Nevertheless, the Soviet Union resumed testing in September 1961, and shortly afterwards the United States took similar action.

10. The breaking of the moratorium drew from the General Assembly an expression of deep concern and profound regret, and a call for renewed efforts towards the conclusion of internationally binding agreements prohibiting all such tests. Testing was, however, intensified in the following months giving rise to marked increases in radiation levels, particularly in the northern hemisphere, in which the tests were held. No significant progress was made in the disarmament negotiations taking place in Geneva. At its 1962 session, the General Assembly referred to the demand of the international community for an immediate end to tests, to the inhibiting effects these tests were having on disarmament efforts and to the scientific evidence presented by UNSCEAR about the effects of radio-active fall-out. The Assembly condemned all nuclear weapons tests and called for such tests to cease immediately, and in any case not later than 1 January 1963.

11. The Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water was signed on 5 August 1963 (Annex I). In that year and in each succeeding year, with the exception of 1964 when the General Assembly met without voting, the General Assembly has urged universal adherence to the Treaty and has called on all States to abide by its letter and its spirit. Further efforts to establish international standards with respect to the testing and development of nuclear weapons have borne fruit, in particular, in the Treaty for the Prohibition of Nuclear Weapons in Latin America of 14 February 1967, and in the Treaty on the Non-Proliferation of Nuclear Weapons of 1 July 1968.

12. In 1969 the Assembly declared the 1970s a decade of disarmament; but nuclear weapons testing in the atmosphere was continued by China and by France. This gave rise to intensified expressions of opposition to, and condemnation of, such tests by the General Assembly and by other United Nations bodies, including the 1972 Stockholm Conference on the Human Environment.

It also injected a new sense of urgency into demands by governments and by the world community that such tests should cease.

13. In 1972 the General Assembly placed greater emphasis than ever before on the dangers of nuclear testing, and on the need to bring it to an end. Once more the General Assembly called attention to the harmful consequences of nuclear testing for the health of present and future generations, and to its connection with the acceleration of the arms race. Once more the Assembly condemned all weapons tests and called on States that had not yet done so to adhere without further delay to the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water. The text containing the latter appeal also expressed the General Assembly's specific concern that the parts of the world in which the testing of nuclear weapons in the atmosphere had continued included the Pacific, despite the strong opposition of various countries in and around the Pacific area. This text—General Assembly resolution 2934 A—received massive support: it was adopted with 105 votes in favour, 4 against, and 9 abstentions.

14. The principal resolutions referred to in this section of the request are set out in Annex II. They show that, in respect of nuclear weapons tests, world opinion has rejected, repeatedly and insistently, the notion that any State has the right to explode nuclear devices in a manner that exposes the peoples of the world to radio-active fall-out. They show, furthermore, that this rule admits no exception: nuclear explosions in the atmosphere do not become legitimate because their scale is relatively small, or because the State conducting them considers them to be essential to its own security interests.

Regional Opposition to Nuclear Testing in the South Pacific

15. The General Assembly's resolution 2934 A (XXVII), already referred to in paragraph 13 of this request, recognized that French nuclear testing in the Pacific had been strongly opposed by countries of the area in which the tests were taking place. No country had expressed its opposition more clearly and consistently than had New Zealand. Annex III to the Application contains the texts of the communications relating to this matter, exchanged between the Governments of New Zealand and of France over a period of ten years. The correspondence begins with the early intimations that France is preparing a nuclear test site in French Polynesia. It covers the whole subsequent course of French nuclear explosions in the South Pacific.

16. From their beginning, in 1963, the New Zealand communications call France's attention to mounting public concern, in New Zealand and elsewhere in the South Pacific region, about the dangers inherent in nuclear testing, as a health hazard, as a threat to the human environment, and as a course of action incompatible with the desire of the world community for substantial measures of disarmament. As the years pass and the testing continues, the people of New Zealand and their Government become ever more convinced of the essential evil of this activity, and of its incongruity in the remote islands of the Pacific in the age of the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water.

17. The New Zealand Government has continued to place all possible reliance on the long history of comradeship in peace and war between New Zealand and France. It has sought to influence French policies through the normal channels of inter-governmental relationships; and, without condoning French testing, it has collaborated with France in monitoring the radio-active fall-out from these tests in various Pacific islands and in New Zealand itself.

18. The New Zealand Government has not inflamed the issue, and has not encouraged private citizens to find other channels for expressing their concern about the continuance of French nuclear testing in the Pacific. Yet, in the last two years, this question has, in New Zealand, assumed the proportions of a dominating political issue, requiring constant and extensive coverage in the daily press and in other news media. There has been intense activity by private individuals and groups to impress upon the New Zealand Government their anxiety about the tests. These representations have been supported by the churches, by local bodies and community organizations, by trade unions, by student and other youth organizations, and by virtually every other grouping of public opinion in a vigilant democratic society.

19. Inevitably, some individuals and groups in New Zealand have not been content simply to bring influence to bear on their own Government. In 1972, to the New Zealand Government's regret, a trade union ban was imposed on the servicing of French shipping and aircraft in New Zealand. This ban seriously interfered with trade and to a less extent with communications between New Zealand and French territories in the South Pacific. During the same period, private vessels sailed for Mururoa with the object of demonstrating their opposition to testing at the test site itself. Similar expeditions are in train this year. It is, however, the firm policy of the New Zealand Government that any necessary and appropriate action to represent internationally the concern of the people of New Zealand should be undertaken by the agencies of the New Zealand Government itself.

20. From the inception of its correspondence with the Government of France, the New Zealand Government has emphasized that its concern with nuclear testing is not confined to considerations directly affecting the inhabitants of New Zealand itself. New Zealand has both a moral and a legal responsibility for the welfare of the people of the non-self-governing territories of Niue and the Tokelau Islands. In common with other administering Powers, New Zealand was reminded of this responsibility by the General Assembly in its resolution 2984 (XXVII) of 14 December 1972 (Annex III), which called for the discontinuance of any further nuclear atmospheric testing in the South Pacific area, in order not to endanger the life and environment of the peoples of the non-self-governing territories situated in that area.

21-22. New Zealand has similar moral and legal responsibilities in relation to the self-governing associated State of the Cook Islands—French Polynesia's nearest neighbour. Moreover, New Zealand has by treaty a special duty to furnish assistance in the independent State of Western Samoa in the conduct of its external relations. Finally, New Zealand and Australia are linked as members of the South Pacific Forum with all of the independent or self-governing island States of the South Pacific area—that is, with Fiji, Tonga, Nauru, Western Samoa and the Cook Islands.

23. During 1965 the New Zealand Government formally conveyed to the French Government a resolution of the Cook Islands Legislative Assembly (see Annex III to the Application), noting the proximity of the Cook Islands to the testing area, and registering its protest at projected nuclear tests which it regarded as a serious menace to health and security in the South Pacific. There were many subsequent occasions to remind France of the dangers to the islands of the South Pacific, and of the anxieties of the islanders themselves. In the three years of its existence, the members of the South Pacific Forum have three times unanimously called upon France to end nuclear testing in the South Pacific.

24. The texts of these and some other recent protests made by countries in or bordering the Pacific are contained in Annex IV to this request. They include a

statement made on 22 June 1972 by the Foreign Ministers of Bolivia, Colombia, Chile, Ecuador and Peru, attending the Third Assembly of the Andean Group; an extract from the communiqué issued on 29 June 1972 by the representatives of the United States, Australia and New Zealand at the conclusion of an ANZUS Council meeting; and an extract from the communiqué issued on 14 July at the conclusion of a meeting of the Foreign Ministers of Indonesia, Malaysia, the Philippines, Singapore and Thailand.

25. These evidences of regional concern are by no means an isolated phenomenon. They have tended to occur in any part of the world subjected to radio-active fall-out. Although in 1954 the dangers associated with nuclear testing were less well understood than they are now, the damage caused by the hydrogen bomb tests conducted by the United States in the Marshall Islands in that year led to vigorous protest by and on behalf of the peoples of the Trust Territory, and by Japan in respect of injuries suffered by her own citizens on the high seas. Similarly, in October 1961, the explosion by the Soviet Union in her own territory of a 50-megaton nuclear weapon was strongly condemned by the whole world, but especially by northern hemisphere countries which were subjected to marked increases in radiation levels as a consequence of the tests.

26. Although these were massive explosions, and their immediate consequences were correspondingly dramatic, there was already a widely held view that safety could not lie in mere restrictions of scale. So, in the late 1950s the preparations by France to conduct nuclear weapons tests in the Sahara gave rise to a series of bilateral and regional appeals from the governments of African States, asking the French Government not to proceed with the planned tests. French assurances that contamination resulting from the tests would be insignificant in no way diminished the regional disquiet which the prospect of these tests occasioned. It was made clear to France that the tests would be regarded by the countries of Northern Africa as an unneighbourly act, which would expose the peoples of the continent and the resources on which they depended to unnecessary hazard. Their stand was upheld by the General Assembly.

27. It is implicit in much of the regional protest that decisions taken half a world away have not been sufficiently responsive to the aspirations and susceptibilities of the peoples closest to the testing site. The peoples and governments of Pacific countries, including New Zealand, seek to preserve the excellence of their own environment; but, in doing so, they appeal to universal standards.

The Consequences for the Environment

28. Further atmospheric nuclear testing at the French Pacific Test Centre will involve the release of radio-active material into the atmosphere and its deposit on land and in the oceans in the vicinity of Mururoa, in the South Pacific region as a whole and in other parts of the world. In varying degrees, the local, regional and global environment and its resources will be contaminated.

29. The contamination of the South Pacific is of special significance; for this region is as yet relatively free from the pollution seriously affecting many other parts of the world. The preservation of the South Pacific environment is of obvious importance to the countries and territories which are located in the region. For many of these countries and territories the sea and its resources are a vital element in their subsistence and economy. Their smallness, their limited

resources and their isolation in a vast ocean constitute a significant barrier both to their relations with the rest of the world and to their development. They can legitimately expect to have these disadvantages offset by an environment free from pollution.

30. The international community as a whole also has a large interest in the preservation of the South Pacific environment: it is one of the few remaining large areas which can serve as a base for the regeneration of gravely depleted marine resources upon which all countries will increasingly depend as a source of food.

31. The link between the collective judgment of the international community on atmospheric nuclear testing and its concern to protect the environment is to be seen in a number of the General Assembly resolutions set out in Annex II. It is also made explicit in the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water (Annex I) which states in the final paragraph of its preamble:

“Seeking to achieve the discontinuance of all test explosions of nuclear weapons for all time, determined to continue negotiations to this end, and desiring to put an end to the contamination of man’s environment by radio-active substances.”

32. The same concern about the damaging effect on the environment of atmospheric nuclear tests was displayed in two successive years in the work of the United Nations Committee on the Peaceful Uses of the Sea-Bed and Ocean Floor Beyond the Limits of National Jurisdiction. Annex IV contains the texts of a proposed statement of views on the atmospheric tests conducted in the Pacific submitted, in August 1971, to Sub-Committee III of the Committee (which is concerned with the prevention of pollution and the preservation of the marine environment) and a draft resolution on the same topic submitted to the same body in August 1972. These proposals, though not adopted because of a unanimity rule, were included in the Committee’s report and give a clear indication of the view of the great majority of States represented.

33. The Conference on the Human Environment, which met in Stockholm in June 1972, and which represented the first comprehensive attempt to grapple with the problems of pollution and to articulate the norms which regulate the use of the environment stressed a similar theme. In its resolution 3 (I) (Annex VI), the Conference referred to the radio-active contamination of the environment from nuclear weapons tests, expressed its belief that “all exposures of mankind to radiation should be kept to the minimum possible and should be justified by benefits that would otherwise not be obtained”, and resolved:

- (a) to condemn nuclear weapons tests, especially those carried out in the atmosphere;
- (b) to call upon those States intending to carry out nuclear weapons tests to abandon their plans to carry out such tests since they may lead to further contamination of the environment.

34. Principle 26 contained in the Declaration adopted by the Conference (Annex VI) states:

“Man and his environment must be spared the effects of nuclear weapons and all other means of mass destruction. States must strive to reach prompt agreement, in the relevant international organs, on the elimination and complete destruction of such weapons.”

35. The Stockholm Conference also proclaimed a number of norms which are more general in scope but which have a direct bearing on the testing of nuclear weapons that gives rise to radio-active fall-out. Paragraph 6 of the Declaration endorsed the view that:

“A point has been reached in history when we must shape our actions throughout the world with a more prudent care for their environmental consequences. Through ignorance or indifference we can do massive and irreversible harm to the earthly environment on which our life and well-being depend.”

Principles 6, 7 and 21 contained in the same Declaration read as follows:

“Principle 6

The discharge of toxic substances or of other substances and the release of heat, in such quantities or concentrations as to exceed the capacity of the environment to render them harmless, must be halted in order to ensure that serious or irreversible damage is not inflicted upon ecosystems. The just struggle of the peoples of all countries against pollution should be supported.

Principle 7

States shall take all possible steps to prevent pollution of the seas by substances that are liable to create hazards to human health, to harm living resources and marine life, to damage amenities or to interfere with other legitimate uses of the sea.

Principle 21

States have in accordance with the Charter of the United Nations and the principles of international law, the sovereign right to exploit their own resources pursuant to their own environmental policies, and the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or of areas beyond the limits of national jurisdiction.”

The Entry into New Zealand, the Cook Islands, Niue and the Tokelau Islands of Radio-Active Material as a Result of French Nuclear Tests

36. Each of the series of French nuclear tests has added to the radio-active fall-out in New Zealand, the Cook Islands and Niue. This fact is established beyond doubt by the monitoring carried out by the National Radiation Laboratory at several stations in various Pacific islands (including the Cook Islands and Niue, as well as Fiji, Tonga, Western Samoa and the Gilbert and Ellice Islands) and in New Zealand. Details of the monitoring and the conclusions drawn from it are found in the National Radiation Laboratory Reports. A list of the relevant numbers of these reports is appended to Annex VII which summarizes information contained in the reports.

37. The overall annual or continuous levels of radio-activity measured by the Laboratory as occurring after the French nuclear tests have not risen above the reference levels used by the Laboratory, although in a few cases radiation has briefly exceeded these levels. The reference levels applied by the Laboratory are derived from dose limits established by the International Commission on Radiological Protection (ICRP); these limits are fixed at levels such that the risks

for members of the public from controlled radiation sources should be no greater than other risks regularly accepted in every day living.

38. Accordingly the Laboratory has on a number of occasions reached the general conclusion, with reference to both stratospheric and tropospheric fall-out, that the levels of fall-out which it has reported do not constitute a public health hazard. (*Annual Summary 1968* (Report No. NRL-F/33) 4, *Annual Summary 1969* (Report No. NRL-F/38) 5, *Annual Summary 1970* (Report No. NRL-F/43) 5, *Annual Report 1971* (Report No. NRL-F/48) 5, *Fallout from Nuclear Weapons Tests conducted by France in the South Pacific during June and July 1972 and comparisons with previous tests series* (NRL-F/49) 7, *Annual Report 1972* (NRL-F/50) 5.)

39. These conclusions are not, however, intended to deny the possibility that low levels of exposure to radiation may in some cases have deleterious effects. Thus, the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) concluded in its 1962 Report:

“It is clearly established that exposure to radiation, even in doses substantially lower than those producing acute effects, may occasionally give rise to a wide variety of harmful effects, including cancer, leukaemia and inherited abnormalities which in some cases may not be easily distinguishable from naturally occurring conditions or identifiable as due to radiation. Because of the available evidence that genetic damage occurs at the lowest levels as yet experimentally tested, it is prudent to assume that some genetic damage may follow any dose of radiation, however small.” (*GA, OR, Seventeenth Session, Suppl. No. 16 (A/5216), Ch. VII, para. 48.*)

40. This very possibility and the surrounding uncertainty has resulted in the statement and application by international authorities (including UNSCEAR, the ICRP and a number of the specialized agencies) and national authorities (including those in New Zealand) of two basic principles or assumptions, namely:

any exposure to radiation may have irreparable, and harmful, somatic and genetic effects; and
any additional exposure to artificial radiation can be justified only by the benefit which results.

41. The New Zealand Government has repeatedly pointed out in its correspondence with the French Government that the radio-active fall-out which reaches New Zealand as a result of French nuclear tests is inherently harmful, and that there is no compensating benefit to justify New Zealand's exposure to such harm. This situation is not made acceptable even by the most stringent safety precautions; nor can such precautions avoid all risks.

42. In illustration of the last point, it is only necessary to note that a faulty assessment of meteorological conditions at the time of a nuclear explosion can lead to unexpectedly high deposits of radio-active material in areas some distance away from the danger zone. There have been several instances during the French testing programme of the phenomenon known as “blowback”, which has caused increased fall-out in the islands to the west of the testing area, including the Cook Islands and Niue (see paras. 11 and 12 of Annex VIII).

43. The New Zealand monitoring programme has shown that any atmospheric nuclear explosion in the South Pacific area will almost certainly cause an increase in the level of radio-active fall-out in New Zealand, the Cook Islands, Niue and the Tokelau Islands, with undetermined consequences for the health

of present and future generations. What is certain is that further nuclear testing will harm the lives of the peoples of the area by causing them apprehension, anxiety and concern.

The Consequences for the Exercise of High Seas Freedoms

44. The Application records the fact that the French Government has purported to declare certain areas of airspace above its territorial waters and the high seas to be zones prohibited to aircraft. It has also claimed to create, on and above the high seas, much more extensive danger zones, applicable to both shipping and aircraft. These zones, which have in some cases exceeded a million square miles, are activated shortly before a test series, and vessels and aircraft are asked to stay outside (see paras. 18-20 of the Application). The activation of the danger zones has not as yet affected regular commercial shipping. They do, however, fall across a possible direct route between New Zealand and the Panama Canal; and it is well established that infrequency of use is not a justification for denial.

45. As was noted above, there is already evidence that the wish to reserve areas of the high seas for nuclear testing is likely to produce actual conflict with people who feel driven to assert their freedom to use the high seas. Private vessels, including those of New Zealand registry, are increasingly claiming to exercise these freedoms in the area around Mururoa. While the New Zealand Government has discouraged action of this kind, the danger of conflict with private vessels still remains. In at least one instance, in 1972, the French authorities took action to inhibit and interfere with an exercise by a foreign vessel of the freedom of the high seas in an area declared by France to form part of a dangerous zone.

Aggravation and Extension of the Dispute

46. Neither the firm friendship which has long existed between New Zealand and France, nor the efforts which the two Governments have made to reach a conclusion acceptable to both, appears to have offered any real prospect of settling this dispute. It would seem that each of the parties adheres to a position of principle which does not admit of compromise.

47. In the submission of the New Zealand Government, supported by the considerations adduced in this request, the resumption of atmospheric nuclear explosions by the French Government must, in these circumstances, aggravate and extend the dispute.

The Urgency of the Request

48. As is recorded in the Application, the French Government has refused to give an assurance that its programme of atmospheric nuclear testing in the South Pacific is at an end. In fact on 2 May 1973 the French Government announced that it did not envisage cancelling or modifying the programme originally planned.

49. The earlier nuclear testing series conducted by France began on 2 July 1966, 5 June 1967, 7 July 1968, 15 May 1970, 5 June 1971 and 25 June 1972 (GMT).

50. Last year the French Government dispensed with notice through the diplomatic channel of an impending test series. There have been indications that the only warning now contemplated by the French authorities is an urgent message activating the danger zone, and that that may give as little as a few days' notice.

Interim Measures Proposed

51. New Zealand submits that, in the light of the considerations set out above, the Court should exercise its power to lay down and indicate interim measures to protect the rights of New Zealand set out in paragraph 2 above. The measure which New Zealand requests to protect those rights is that France refrain from conducting any further nuclear tests that give rise to radio-active fall-out while the Court is seized of the case.

(Signed) H. V. ROBERTS,

Co-Agent of the Government of New Zealand.

ANNEXES TO THE REQUEST FOR THE INDICATION
OF INTERIM MEASURES OF PROTECTION

Annex I

TREATY BANNING NUCLEAR WEAPON TESTS IN THE ATMOSPHERE,
IN OUTER SPACE AND UNDER WATER

[See Annex 10 to the Australian Request for the Indication of Interim Measures
of Protection, I, pp. 120-121]

Annex II

GENERAL ASSEMBLY RESOLUTIONS RELATING TO NUCLEAR
WEAPONS DEVELOPMENT AND TESTING

1148 (XII) 1957	1910 (XVIII) 1963
1252 A and B (XIII) 1958	2032 (XX) 1965
1379 (XIV) 1959	2163 (XXI) 1966
1402 A and B (XIV) 1959	2343 (XXII) 1967
1577 (XV) 1960	2455 (XXIII) 1968
1578 (XV) 1960	2604 B (XXIV) 1969
1629 I (XVI) 1961	2661 A (XXV) 1970
1632 (XVI) 1961	2663 B (XXV) 1970
1648 (XVI) 1961	2828 (XXVI) 1971
1762 A (XVII) 1962	2934 A to C (XXVII) 1972

United Nations General Assembly Resolution 1148 (XII) of 14 November 1957 on the "Regulation, Limitation and Balanced Reduction of All Armed Forces and All Armaments; Conclusion of an International Convention (Treaty) on the Reduction of Armaments and the Prohibition of Atomic, Hydrogen and Other Weapons of Mass Destruction"

The General Assembly,

Recalling its resolution 808 (IX) of 4 November 1954,

Emphasizing the urgency of decreasing the danger of war and improving the prospects of a durable peace through achieving international agreement on reduction, limitation and open inspection of armaments and armed forces,

Welcoming the narrowing of differences which has resulted from the extensive negotiations in the Sub-Committee of the Disarmament Commission,

Believing that immediate, carefully measured steps can be taken for partial measures of disarmament and that such steps will facilitate further measures of disarmament,

1. *Urges* that the States concerned, and particularly those which are members of the Sub-Committee of the Disarmament Commission, give priority to reaching a disarmament agreement which, upon its entry into force, will provide for the following:

(a) The immediate suspension of testing of nuclear weapons with prompt installation of effective international control, including inspection posts equipped with appropriate scientific instruments located within the territories of the United States of America, the Union of Soviet Socialist Republics, and the United Kingdom of Great Britain and Northern Ireland, in Pacific Ocean areas, and at other points as required;

(b) The cessation of the production of fissionable materials for weapons purposes and the complete devotion of future production of fissionable materials to non-weapons purposes under effective international control;

(c) The reduction of stocks of nuclear weapons through a programme of transfer, on an equitable and reciprocal basis and under international supervision, of stocks of fissionable material from weapons uses to non-weapons uses;

(d) The reduction of armed forces and armaments through adequate, safeguarded arrangements;

(e) The progressive establishment of open inspection with ground and aerial components to guard against the possibility of surprise attack;

(f) The joint study of an inspection system designed to ensure that the sending of objects through outer space shall be exclusively for peaceful and scientific purposes;

2. *Requests* the Disarmament Commission to reconvene its Sub-Committee as soon as feasible for this purpose;

3. *Requests* the Disarmament Commission to invite its Sub-Committee to establish, as one of its first tasks, a group or groups of technical experts to study inspection systems for disarmament measures on which the Sub-Committee may reach agreement in principle and to report to it within a fixed period;

4. *Recommends* that any such technical group or groups be composed of one expert from each of the States members of the Sub-Committee and one from each of three other States Members of the United Nations which shall be designated by the Secretary-General in consultation with the Sub-Committee;

5. *Invites* the States concerned, and particularly those which are members of the Sub-Committee, to consider the possibility of devoting, out of the funds made available as a result of disarmament, as and when sufficient progress is made, additional resources to the improvement of living conditions throughout the world and especially in the less developed countries;

6. *Requests* the Sub-Committee to report to the Disarmament Commission by 30 April 1958 on the progress achieved.

United Nations General Assembly Resolution 1252 A and B (XIII) of 4 November 1958 on the "Question of Disarmament; the Discontinuance of Atomic and Hydrogen Weapons Tests; the Reduction of the Military Budgets of the Union of Soviet Socialist Republics, the United States of America, the United Kingdom of Great Britain and Northern Ireland and France by 10 to 15 Per Cent. and the Use of Part of the Savings so Effected for Assistance to the Under-Developed Countries"

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The General Assembly,

Reaffirming the continuing interest and responsibility of the United Nations in the field of disarmament, which have found expression in the Charter of the United Nations and in previous resolutions of the General Assembly,

Welcoming the agreement which has been achieved in the Conference of Experts to Study the Possibility of Detecting Violations of a Possible Agreement on the Suspension of Nuclear Tests,

Noting that negotiations on the suspension of nuclear weapons tests and on the actual establishment of an international control system on the basis of the report of the Conference of Experts began on 31 October 1958,

Noting further that qualified persons are expected to meet soon to study the technical aspects of measures against the possibility of surprise attack,

Recognizing that these developments are encouraging steps in the direction of progressive openness of information concerning technologies and armaments, which may assist in promoting the fundamental aims of the United Nations in the field of disarmament,

I

1. *Urges* that in the negotiations between States that have tested nuclear weapons the parties make every effort to reach early agreement on the suspension of nuclear weapons tests under effective international control;

2. *Urges* the parties involved in these negotiations not to undertake further testing of nuclear weapons while these negotiations are in progress;

II

3. *Calls attention* to the importance and urgency of achieving the widest possible measure of agreement in the forthcoming study of the technical aspects of measures against the possibility of surprise attack;

III

4. *Expresses determination* that the trend of the recent encouraging initiatives, including the technical approach, should continue with a view to contributing to a balanced and effectively controlled world-wide system of disarmament;

IV

5. *Invites* the conferences on nuclear weapons tests and on surprise attack to avail themselves of the assistance and services of the Secretary-General and requests them to keep the United Nations informed;

6. *Invites* the Secretary-General, in consultation with the Governments concerned, to render whatever advice and assistance may seem appropriate to facilitate current developments or any further initiatives related to problems of disarmament;

7. *Requests* that the records of the meetings of the First Committee at which various aspects of disarmament were discussed be transmitted by the Secretary-General to the participants in the conferences on nuclear weapons tests and on surprise attack;

V

8. *Reiterates* to the States concerned the invitation, made in General Assembly resolution 1148 (XII) of 14 November 1957, to devote, out of the funds made available as a result of disarmament, as and when sufficient progress is made, additional resources to the improvement of living conditions throughout the world and especially in the less developed countries.

B

The General Assembly,

Welcoming the report of the Conference of Experts to Study the Possibility of Detecting Violations of a Possible Agreement on the Suspension of Nuclear Tests,

Welcoming further the decision of the States which have tested nuclear weapons to meet in a conference at Geneva, commencing 31 October 1958, concerning the question of nuclear weapons tests,

1. *Expresses the hope* that the conference will be successful and lead to an agreement acceptable to all;

2. *Requests* the parties concerned to report to the General Assembly the agreement that may be the result of their negotiations;

3. *Requests* the Secretary-General to render such assistance and provide such services as may be asked for by the conference commencing at Geneva on 31 October 1958.

United Nations General Assembly Resolution 1379 (XIV) of 20 November 1959 on the "Question of French Nuclear Tests in the Sahara"

The General Assembly,

Conscious of the great concern throughout the world repeatedly expressed in the United Nations over the prospect of further nuclear tests and their effects upon mankind,

Noting the declared intention of the Government of France to undertake nuclear tests in the Sahara,

Considering the deep concern felt over the dangers and risks which such tests entail,

Considering that significant progress is being made in the negotiations now proceeding at Geneva concerning the discontinuance of nuclear weapons tests under an international control system,

Considering that the parties to those negotiations have facilitated their progress by voluntarily suspending such tests,

Considering that the purpose of the said negotiations is to bring about a general discontinuance of nuclear weapons tests and that it is to be hoped that, in the same spirit which inspired the present voluntary suspension of tests, no State will initiate or resume tests of this kind,

Recognizing the anxiety caused by the contemplated tests in the Sahara among all peoples, and more particularly those of Africa,

1. *Expresses its grave concern* over the intention of the Government of France to conduct nuclear tests;
2. *Requests* France to refrain from such tests.

United Nations General Assembly Resolution 1402 A and B (XIV) of 21 November 1959 on the "Suspension of Nuclear and Thermonuclear Tests"

A

The General Assembly,

Recalling its resolution 1252 B (XIII) of 4 November 1958,

Noting that the negotiations on the discontinuance of nuclear weapons tests and on the establishment of an appropriate international control system, which began at Geneva on 31 October 1958, and still continuing,

1. *Expresses its appreciation* to the States concerned for their efforts to reach an agreement relating to the prohibition of nuclear weapons tests and including an appropriate international control system;
2. *Expresses the hope* that these States will intensify their efforts to reach such an agreement at an early date;
3. *Urges* the States concerned in these negotiations to continue their present voluntary discontinuance of the testing of nuclear weapons;
4. *Requests* the States concerned to report to the General Assembly the results of their negotiations.

B

The General Assembly,

Desiring to safeguard mankind from the increasing hazards resulting from tests of nuclear and thermonuclear weapons,

Bearing in mind the profound concern evinced by the peoples of all countries regarding the testing of nuclear and thermonuclear weapons,

Welcoming the endeavours at Geneva of the States concerned to reach an agreement on the discontinuance of these tests, and the progress so far achieved,

Noting with appreciation that the States concerned have voluntarily suspended such tests, enabling progress in the discussions at Geneva,

Considering that an agreement on the cessation of nuclear and thermonuclear tests with effective international control is urgent,

1. *Expresses its appreciation* to the States concerned for their patient and sincere efforts to reach agreement on the discontinuance of nuclear and thermonuclear tests with effective international control, and for the progress hitherto achieved;
2. *Expresses further the hope* that the States concerned will reach such agreement at an early date;
3. *Appeals* to the States concerned in the Geneva discussions to continue their present voluntary suspension of tests, and to other States to desist from such tests;
4. *Requests* the States concerned to report to the Disarmament Commission and to the General Assembly the results of their negotiations.

United Nations General Assembly Resolution 1577 (XV) of 20 December 1960 on the "Suspension of Nuclear and Thermonuclear Tests"

The General Assembly,

Recalling its resolutions 1252 B (XIII) of 4 November 1958 and 1402 (XIV) of 21 November 1959,

Considering the importance and urgency of an agreement on the prohibition of nuclear and thermonuclear weapons tests, with effective international control,

Noting with satisfaction that further progress with regard to such an agreement has been achieved at the negotiations in Geneva since the fourteenth session of the General Assembly and that the States concerned have voluntarily suspended such tests since the autumn of 1958,

1. *Urges* the States concerned to seek a solution for the few remaining questions, so that the conclusion of the agreement will be achieved at an early date;
2. *Urges* the States concerned in these negotiations to continue their present voluntary suspension of the testing of nuclear weapons;
3. *Requests* the parties concerned to report the results of their negotiations to the Disarmament Commission and to the General Assembly.

United Nations General Assembly Resolution 1578 (XV) of 20 December 1960 on the "Suspension of Nuclear and Thermonuclear Tests"

The General Assembly,

Recalling its resolutions 1379 (XIV) of 20 November 1959 and 1402 (XIV) of 21 November 1959,

Continuing to bear in mind the profound concern evinced by the peoples of all countries regarding the testing of nuclear and thermonuclear weapons and the consequences thereof,

Recognizing that, as a result of the endeavours at Geneva of the parties concerned, substantial progress has been made towards reaching agreement on the cessation of the testing of nuclear and thermonuclear weapons, under appropriate international control,

Recognizing further that agreement on the cessation of tests of nuclear and thermonuclear weapons is not only imperative but urgent,

1. *Urges* the States concerned to make every effort to reach agreement as soon as possible on the cessation of tests of nuclear and thermonuclear weapons, under appropriate international control;

2. *Urges* the States concerned in the Geneva negotiations to continue their present voluntary suspension of the testing of nuclear and thermonuclear weapons, and requests other States to refrain from undertaking such tests;

3. *Requests* the States concerned in the Geneva negotiations:

(a) To keep the Disarmament Commission periodically informed of the progress of their negotiations;

(b) To report the results of their negotiations to the Disarmament Commission and to the General Assembly.

United Nations General Assembly Resolution 1629 I (XVI) of 27 October 1961 on the "Annual Progress Report of United Nations Scientific Committee on Effects of Atomic Radiation for 1961"

The General Assembly,

I

Deeply concerned that as a result of the renewed discharge into the earth's environment of radio-active debris there have been sharp increases in the levels of radio-active fall-out in many parts of the world,

Fearful that the prolonged exposure of mankind to increasing levels of radio-active fall-out would constitute a growing threat to this and future generations,

Recognizing the great importance of the contribution made by the United Nations Scientific Committee on the Effects of Atomic Radiation in the study of the extent and nature of this hazard,

1. *Declares* that both concern for the future of mankind and the fundamental principles of international law impose a responsibility on all States concerning actions which might have harmful biological consequences for the existing and future generations of peoples of other States, by increasing the levels of radio-active fall-out;

2. *Approves* the annual progress report of the United Nations Scientific Committee on the Effects of Atomic Radiation and draws particular attention to the Committee's view that the resumption of nuclear test explosions since the publication of its last comprehensive report increases the urgency for the intensification of relevant scientific studies;

3. *Expresses appreciation* for the valuable information on radio-active contamination, radiation levels, and radio-biological questions which has been furnished to the Scientific Committee by member States, the specialized agencies, the International Atomic Energy Agency, the International Commission on Radiological Protection and the International Commission on Radiolo-

gical Units and Measurements, in compliance with General Assembly resolutions 1376 (XIV) of 17 November 1959 and 1574 (XV) of 20 December 1960;

4. *Reaffirms* the desirability of continuing full international co-operation through the Scientific Committee and interchanges of the results and experience of research conducted at the national level, so that man's knowledge of the hazards of radiation will constantly improve and in particular so that the second comprehensive report to be presented in 1962 by the Committee will be as scientifically authoritative and informative as possible;

5. *Invites* countries wishing to do so to take advantage of the offers of laboratory facilities which have been made by member States, the World Health Organization and the International Atomic Energy Agency for the analysis of samples of air, water, bone, soil and food collected in their territories, as envisaged in section IV of resolution 1376 (XIV);

6. *Requests* the Scientific Committee to examine the possibility of accelerating its second comprehensive report and to consider at the earliest possible time whether the facts at its disposal call for the submission of an interim report.

United Nations General Assembly Resolution 1632 (XVI) of 27 October 1961 on the "Continuation of Suspension of Nuclear and Thermonuclear Tests and Obligations of States to Refrain from their Renewal; The Urgent Need for a Treaty to Ban Nuclear Weapons Tests under Effective International Control"

The General Assembly,

Seized of the question of halting nuclear weapons tests,

Solemnly appeals to the Government of the Union of Soviet Socialist Republics to refrain from carrying out its intention to explode in the atmosphere a 50-megaton bomb before the end of this month.

United Nations General Assembly Resolution 1648 (XVI) of 6 November 1961 on the "Continuation of Suspension of Nuclear and Thermonuclear Tests and Obligations of States to Refrain from their Renewal"

The General Assembly,

Recalling its resolution 1577 (XV) of 20 December 1960 which urged the States concerned to continue the suspension of test explosions, and also its resolution 1578 (XV) of the same date,

Further recalling its resolution 1379 (XIV) of 20 November 1959,

Bearing in mind both the grave and continuing hazards of radiation resulting to humanity from test explosions as well as their adverse consequences to the prospects of world peace through heightening rather than lessening international tensions,

Considering it urgent and imperative that no further tests should take place,

1. *Expresses its deep concern and profound regret* that test explosions have been resumed;

2. *Earnestly urges* the States concerned to refrain from further test explosions pending the conclusion of necessary internationally binding agreements in regard to tests;

3. *Expresses confidence* that the States concerned will reach agreement as soon as possible on the cessation of tests of nuclear and thermonuclear weapons, under appropriate international control;

4. *Calls upon* the States concerned to engage themselves with urgency and speed in the necessary efforts to conclude such agreements expeditiously.

United Nations General Assembly Resolution 1762 A (XVII) of 6 November 1962 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 9 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 118*]

United Nations General Assembly Resolution 1910 (XVIII) of 27 November 1963 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 11 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 122*]

United Nations General Assembly Resolution 2032 (XX) of 3 December 1965 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 12 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 123*]

United Nations General Assembly Resolution 2163 (XXI) of 5 December 1966 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 13 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 124*]

United Nations General Assembly Resolution 2343 (XXII) of 19 December 1967 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 14 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 125*]

United Nations General Assembly Resolution 2455 (XXIII) of 20 December 1968 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 15 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 126*]

United Nations General Assembly Resolution 2604 B (XXIV) of 16 December 1969 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 16 of the Australian Request for the Indication of Interim Measures of Protection, I, p. 127*]

United Nations General Assembly Resolution 2661 A (XXV) of 7 December 1970 on "General and Complete Disarmament"

The General Assembly,

Convinced of the necessity, for the very survival of mankind, of bringing the nuclear arms race to an immediate halt,

Recalling its resolutions 2456 D (XXIII) of 20 December 1968 and 2602 A (XXIV) of 16 December 1969,

Noting with satisfaction the continuation of bilateral negotiations between the Governments of the Union of Soviet Socialist Republics and the United States of America on the limitation of offensive and defensive strategic nuclear-weapon systems,

Believing that the possibilities for rapid success in these negotiations would increase if steps were taken now by the nuclear-weapon Powers to halt the development of new nuclear weapons,

Urges the Governments of the nuclear-weapon Powers to bring about an immediate halt in the nuclear arms race and to cease all testing as well as deployment of offensive and defensive nuclear-weapon systems.

United Nations General Assembly Resolution 2663 B (XXV) of 7 December 1970 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 17 of the Australian Request for the Indication of Interim Measures of Protection, I, p. 128*]

United Nations General Assembly Resolution 2828 (XXVI) of 16 December 1971 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 18 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 129*]

United Nations General Assembly Resolution 2934 A-C (XXVII) of 29 November 1972 on the "Urgent Need for Suspension of Nuclear and Thermonuclear Tests"

[*See Annex 21 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 139*]

Annex III

UNITED NATIONS GENERAL ASSEMBLY RESOLUTION 2984 (XXVII) OF 14 DECEMBER 1972 ON THE "QUESTION OF AMERICAN SAMOA, BAHAMAS, BERMUDA, BRITISH VIRGIN ISLANDS, BRUNEI, CAYMAN ISLANDS, COCOS (KEELING) ISLANDS, GILBERT AND ELLICE ISLANDS, GUAM, MONTSERRAT, NEW HEBRIDES, PITCAIRN, ST. HELENA, SEYCHELLES, SOLOMON ISLANDS, TURKS AND CAICOS ISLANDS AND UNITED STATES VIRGIN ISLANDS"

The General Assembly,

Having considered the question of American Samoa, Bahamas, Bermuda, British Virgin Islands, Brunei, Cayman Islands, Cocos (Keeling) Islands, Gilbert and Ellice Islands, Guam, Montserrat, New Hebrides, Pitcairn, St. Helena, Seychelles, Solomon Islands, Turks and Caicos Islands and United States Virgin Islands,

Having examined the relevant chapters of the report of the Special Committee on the Situation with regard to the Implementation of the Declaration on the Granting of Independence to Colonial Countries and Peoples,

Recalling its resolution 1514 (XV) of 14 December 1960, containing the Declaration on the Granting of Independence to Colonial Countries and Peoples, and its resolution 2621 (XXV) of 12 October 1970, containing the programme of action for the full implementation of the Declaration,

Recalling its previous resolution relating to those Territories, in particular resolution 2869 (XXVI) of 20 December 1971,

Deploing the intransigent attitude of the Governments of the United Kingdom of Great Britain and Northern Ireland and France, in contravention of the provisions of the relevant resolutions of the General Assembly, and their persistence in refusing to co-operate with the Special Committee in its examination of the Territories under their administration,

Deeply deploring the policy of those administering Powers which continue to maintain military bases in some of the Territories under their administration, in contravention of the relevant resolutions of the General Assembly,

Deeply deploring also the attitude of those administering Powers which continue to refuse to allow United Nations missions to visit the Territories under their administration,

Bearing in mind in particular the positive results achieved as a consequence of the visits by United Nations missions to other colonial Territories and reiterating its conviction that the dispatch of visiting missions to the above-mentioned Territories is indispensable for securing adequate and first-hand information in regard to political, economic and social conditions in the Territories and to the views, wishes and aspirations of the peoples therein,

Deeply concerned about the adverse effects of continued nuclear atmospheric testing in the South Pacific on the life, welfare and environment of the peoples of the Non-Self-Governing Territories situated therein, and affirming that those peoples have the right to be free of the hazards to their lives, welfare and environment caused by such tests,

Mindful that the Territories listed above require the continued attention and assistance of the United Nations in the achievement by their peoples of the objectives embodied in the Charter of the United Nations and in the Declaration of the Granting of Independence to Colonial Countries and Peoples,

Aware of the special circumstances of the geographical location and the economic conditions of those Territories,

1. *Approves* the chapters of the report of the Special Committee on the Situation with regard to the Implementation of the Declaration on the Granting of Independence to Colonial Countries and Peoples relating to the Territories listed above;

2. *Reaffirms* the inalienable right of the peoples of those Territories to self-determination and independence in accordance with the Declaration on the Granting of Independence to Colonial Countries and Peoples;

3. *Calls upon* the administering Powers concerned to take all the necessary steps, without further delay, to ensure the full and speedy attainment of the goals set forth in the Declaration with respect to the Territories and, in that regard, to establish, in consultation with the freely elected representatives of the people, a specific time-table for the free exercise by the peoples of those Territories of their right to self-determination and independence;

4. *Reaffirms its conviction* that the questions of territorial size, geographical isolation and limited resources should in no way delay the implementation of the Declaration with respect to the Territories concerned;

5. *Strongly deprecates* any attempt aimed at the partial or total disruption of the national unity and territorial integrity of colonial Territories and the establishment of military bases and installations in those Territories, as being incompatible with the purposes and principles of the Charter of the United Nations and of General Assembly resolution 1514 (XV);

6. *Once again calls upon* the administering Powers concerned to reconsider their attitude towards the receiving of United Nations visiting missions to the above-mentioned Territories and to permit access by such missions to Territories under their administration;

7. *Calls upon* the administering Powers concerned to participate in the relevant proceedings of the Special Committee relating to the Territories under their administration and, in particular, to report to the Special Committee on the implementation of the present resolution;

8. *Requests* the United Nations system of organizations to assist in accelerating progress in all sectors of the national life of those Territories;

9. *Calls upon* the administering Power concerned, in view of its responsibility towards the welfare of the peoples of the Non-Self-Governing Territories in the region, to discontinue any further nuclear atmospheric testing in the South Pacific area, in order not to endanger the life and environment of the peoples of the Territories concerned;

10. *Invites* the Secretary-General, having regard to the mandate entrusted to him in General Assembly resolution 2909 (XXVII) of 2 November 1972, to pay particular regard to the need to intensify widespread dissemination of information on the process of decolonization in respect of the Territories listed above;

11. *Requests* the Special Committee to continue to give full consideration to this question, including in particular the dispatch of visiting missions to those Territories, and to report to the General Assembly at its twenty-eighth session on the implementation of the present resolution.

Annex IV

REGIONAL OPPOSITION TO NUCLEAR TESTS IN THE
SOUTH PACIFIC

Extract from the communiqué issued on 7 August 1971 at the conclusion of the first meeting of the South Pacific Forum.

Resolution adopted by a meeting of the Pacific Island Producers Association on 14 June 1972.

Statement signed by the Prime Ministers of New Zealand and Australia on 20 June 1972 and transmitted to the Chairman of the Conference of the Committee on Disarmament.

Passages from a declaration made on 22 June 1972 by the Foreign Ministers of the countries of the Andean Group.

Extract from the communiqué issued on 29 June 1972 at the conclusion of the ANZUS Council meeting.

Extract from the communiqué issued on 14 July 1972 at the conclusion of a meeting of the Foreign Ministers of Indonesia, Philippines, Malaysia, Singapore and Thailand.

Extract from the communiqué issued on 14 September 1972 at the conclusion of the third meeting of the South Pacific Forum.

Extract from the communiqué issued by the Prime Minister of New Zealand and the Deputy Prime Minister of Malaysia following their meeting on 25 March 1973.

Motion adopted unanimously by the Cook Islands Legislative Assembly on 11 April 1973.

Extract from the communiqué issued on 19 April 1973 at the conclusion of the fourth meeting of the South Pacific Forum.

Extract from communiqué issued by the Prime Ministers of New Zealand and Australia on 23 January 1973.

Extract from the Communiqué Issued on 7 August 1971 at the Conclusion of the First Meeting of the South Pacific Forum

[See No. 3 in the Annex to the Fiji Application for Permission to Intervene in the Australia v. France case, I, p. 154]

Resolution Adopted by a Meeting of the Pacific Island Producers Association on 14 June 1972

The Prime Ministers of Western Samoa, Tonga, and Fiji, the Premier of the Cook Islands and representatives of the Niuean and Gilbert and Ellice Islands Governments, meeting in Rarotonga during the seventh session of the Pacific Islands Producers Association, unanimously agreed to register a strong protest against the French Government's decision to proceed with further nuclear tests on Mururoa Atoll. These tests are a real threat not only to the peoples of the South Pacific but also to their environment. The conference

deplores the French Government's attitude in persisting with these tests in spite of repeated requests by the Governments and peoples of the South Pacific region to stop them: despite its assurances about the inoffensiveness of these nuclear explosions to health and safety, and to marine life which is a vital element in the economy of South Pacific countries, the French Government continues to conduct them at a point of the earth's surface far removed from the mass of its own people.

The continuation of these tests is an impediment to the joint efforts of the Pacific Islands Governments and this Association to improve the quality of life in the South Pacific region. The member governments of the Pacific Island Producers' Association, therefore, urge the French Government to reconsider its intention and to call a definitive halt to its nuclear tests programme in this region.

Statement Signed by the Prime Ministers of New Zealand and Australia on 20 June 1972 and Transmitted to the Chairman of the Conference of the Committee on Disarmament

Upon the resumption of the meetings of the Conference of the Committee on Disarmament, it is a matter of the deepest regret that it should prove necessary for the Australian and New Zealand Prime Ministers, meeting in Canberra, to address themselves to you to express their joint protest that a further series of atmospheric tests of nuclear weapons should be imminent in the South Pacific. The Government of France must bear the full responsibility for the decision which it has apparently taken to proceed with such tests. It does so contrary to the appeals made to it by many Pacific countries, contrary to the urging of the General Assembly and contrary to the recent call by the Stockholm Conference which has especially condemned those tests carried out in the atmosphere.

The Australian and New Zealand Governments, reflecting the grave concern felt throughout their communities and conscious that the problem of atmospheric testing in their region is part only of a broader problem, recalling their support at the United Nations General Assembly November 1971 for resolution 2828 (C), which stressed the urgency of bringing to a halt all nuclear weapon testing in all environments by all States, call jointly on the Conference of the Committee on Disarmament to continue to accord high priority to the question of the urgent need for suspension of such tests and the formulation of a comprehensive test ban treaty.

Passages from a Declaration Made on 22 June 1972 by the Foreign Ministers of the Countries of the Andean Group

The Ministers of Foreign Affairs of Bolivia, Colombia, Chile, Ecuador, and Peru, attending at Lima the Third Assembly of the Andean Group, are informed that the French Government has declared a zone of the South Pacific as a dangerous area for navigation and aero-navigation and this constitutes an evident sign of nuclear testing around the Mururoa Atoll.

The Foreign Ministers of the Andean Group condemn such experiments as being dangerous to both present and future generations of mankind as well as to the normal development of animal and vegetable life in the world and in particular in this area inasmuch as such tests introduce elements of environmental contamination which disturb the ecological balance in the South Pacific region.

The conclusions approved by the General Assembly of the United Nations as well as the results of the recent Conference on the Human Environment confirm the views of the members of the Andean Group and oblige them to call for the immediate cessation of these nuclear tests.

*Extract from the Communiqué Issued on 29 June 1972
at the Conclusion of the ANZUS Council Meeting*

The council observed that, notwithstanding the mounting opposition amongst countries of the Pacific, nuclear tests were still being conducted in the atmosphere. The ANZUS partners, being parties to the Nuclear Test Ban Treaty of 1963, affirmed their hope that there should be universal adherence to this treaty. It was noted that, in response to the deep and widespread concern felt throughout their communities at the further series of tests in the South Pacific, the Prime Ministers of Australia and New Zealand had issued a joint call to the Conference of the Committee on Disarmament. It was agreed that progress in this area would respond to the deeply held feelings and aspirations of the peoples of the Pacific area.

*Extract from the Communiqué Issued on 14 July 1972 at the Conclusion of a
Meeting of the Foreign Ministers of Indonesia, Philippines, Malaysia,
Singapore and Thailand*

The meeting deplored nuclear tests anywhere in the world. Such tests pose unknown hazards to human life, disturb ecology and pollute the environment, and are in defiance of the Declaration adopted by the Stockholm Conference on the Human Environment. Moreover, they are contrary to the letter and spirit of the United Nations Treaty banning nuclear weapon tests in the atmosphere, in outer space and under water, which has received almost universal support.

*Extract from the Communiqué Issued on 14 September 1972 at the Conclusion
of the Third Meeting of the South Pacific Forum*

The question of nuclear weapons tests was extensively discussed in the light of the series of tests recently concluded by France.

Members were unanimous in expressing their deep concern that the French Government should have failed so signally to accord recognition to the wishes of the peoples of the South Pacific area despite the views so clearly indicated by both governments and peoples. The fact that radio-active fall-out from this year's series was low because of the nature of the test explosions carried out did not lessen their opposition, which would remain unaltered until such time as a firm assurance was given that the South Pacific would not be used as a site for further experimentation of this kind with its resulting implications for man and his environment, and in particular the marine environment.

Members exchanged views as to the ways and means by which they could pursue their common objective of bringing to an end all nuclear weapons tests in all environments by any country. The Prime Minister of New Zealand and the Minister for Foreign Affairs of Australia informed the meeting of the steps being taken by the two Governments to invite Pacific member States of the United Nations similarly concerned about this matter to meet in New York

during the early stage of the forthcoming session of the General Assembly, and outlined the approach which they intended to adopt. The warm support of other Forum members was voiced for this initiative.

*Extract from the Communiqué Issued by the Prime Minister of New Zealand
and the Deputy Prime Minister of Malaysia Following their Meeting
on 25 March 1973*

The two leaders noted that the continuation of atmospheric testing of nuclear weapons in the Pacific was causing deep concern in many countries of the region. Mr. Kirk outlined the policy New Zealand was following in an endeavour to bring about a halt to these tests. Both leaders reaffirmed their Governments' earnest wish to see an early end to all nuclear weapons testing in whatever environment and expressed their determination to continue to work for this objective in the United Nations and elsewhere.

*Motion Adopted Unanimously by the Cook Islands Legislative Assembly
on 11 April 1973*

That this Assembly deplores the continuation of atmospheric tests of nuclear weapons in our neighbouring islands of French Polynesia in spite of repeated protests by Governments, Parliaments and the peoples of the Pacific;

Expresses its deep concern and apprehension at the potential hazards that such tests pose to the health and safety of our islands and the associated marine life;

Supports wholeheartedly the steps being taken by New Zealand and other nations to seek the immediate discontinuance of such tests and requests the New Zealand Government to communicate the Assembly's expression of censure to the Government of France.

*Extract from the Communiqué Issued on 19 April 1973 at the Conclusion
of the Fourth Meeting of the South Pacific Forum*

The Forum recalled the expression of opposition at the meetings of the Forum in 1971 and 1972 to atmospheric nuclear weapons testing conducted by France in the South Pacific. Members took note of the fact that their opposition was increasingly shared by world opinion. They welcomed the most recent resolution of the United Nations General Assembly, calling, with renewed urgency, for a halt to all atmospheric testing of nuclear weapons in the Pacific and elsewhere in the world. Members were once again unanimous in expressing their deep concern at the apparent continuing failure of the French Government to apprehend the extent of opposition to the conduct by France of its tests in the Pacific area and to respect the wishes of the peoples of the area. They reaffirmed their strong opposition to these tests which exposed their peoples as well as their environment to radio-active fall-out against their wishes and without benefit to them, and which demonstrated deplorable indifference to their future well being. They urged the Government of France to heed the call of the United Nations General Assembly and its obligations under international law by bringing about an immediate halt to all testing in the area. Members expressed their determination to use all proper and practicable means open to them to bring an end to nuclear testing particularly in the South Pacific.

Extract from Communiqué Issued by the Prime Ministers of New Zealand and Australia on 23 January 1973

The Prime Ministers accorded high priority to the problem posed by continued nuclear weapons testing. They emphasized that their opposition extended to all forms of nuclear weapons testing by whatever nation and reaffirmed the objectives of a suspension of all such testing and the conclusion of a comprehensive test-ban treaty.

They appealed in particular to France to appreciate the special degree of concern which the testing of nuclear weapons in the South Pacific causes throughout the region. They recalled that an overwhelming majority in the United Nations had already acknowledged the legitimate nature of this widespread concern. The Prime Ministers declared their Governments' intention, failing such an assurance, to work together to oppose the tests by all appropriate means and to consult closely with other countries in the region.

Annex V

PROPOSED STATEMENT OF VIEWS ON ATMOSPHERIC NUCLEAR TESTS IN THE PACIFIC SUBMITTED TO SUBCOMMITTEE III OF THE UNITED NATIONS COMMITTEE ON THE PEACEFUL USES OF THE SEA-BED AND OCEAN FLOOR BEYOND THE LIMITS OF NATIONAL JURISDICTION (AUGUST 1971)

Subcommittee III request their Chairman to convey to the Chairman of the United Nations Committee on the Peaceful Uses of the Sea-bed and Ocean Floor and through the latter to the Secretary-General of the United Nations, their anxious concern at the continuance of atmospheric nuclear weapon tests in the ocean environment which has again been brought to public attention by the explosion by the Government of France of a prototype thermonuclear device in the Pacific region as part of a continuing series of nuclear weapon test explosions at Mururoa.

The Subcommittee have noted the assurances given by the representative of France that effective measures were taken by the Government of France to prevent harmful consequences arising from the particular activities to which reference has been made.

In expressing their anxious concern the Subcommittee have in mind their special responsibility to propose legal norms for the preservation of the marine environment, including the preservation of marine life, which is a vital element in the subsistence and economy of the Pacific Islanders.

The Subcommittee believe that it is also desirable to address an urgent appeal to the Government of France that, in view, *inter alia*, of the possibility of serious harm to the marine environment and to marine life, it cease atmospheric nuclear weapon test explosions.

(This statement of views was submitted by Australia, Japan, Malta, New Zealand, Peru and the Philippines. The report of the Sea-Bed Committee to the General Assembly states (A/8421, para. 173): "In view, however, of the opposition of the delegation of the Member State conducting the tests, the Subcommittee was unable to take a decision by consensus.")

Draft Resolution on Nuclear Weapons Tests in the Pacific Submitted to Subcommittee III of the United Nations Committee on the Peaceful Uses of the Sea-Bed and Ocean Floor Beyond the Limits of National Jurisdiction (August 1972)

The Committee on the Peaceful Uses of the Sea-bed and the Ocean Floor, *Recalling* the suggested statement of views submitted to its Subcommittee III at the 8th meeting of that Subcommittee (A/8421, Annex V),

Further recalling the resolution on the subject of nuclear testing adopted by the United Nations Conference on the Human Environment, as well as Principle 26 of the Declaration on the Human Environment adopted by the same Conference,

Acting in furtherance of the principles of the Partial Nuclear Test Ban Treaty,

Having noted the concern of the nations and peoples of the Pacific at, and their opposition to, the conduct of the nuclear weapon tests in that region,

Bearing in mind its obligation to propose legal norms for the preservation of the marine environment and the prevention of marine pollution;

1. *Declares* that no further nuclear weapons tests likely to contribute to the contamination of the marine environment should be carried out,

2. *Requests* its Chairman to forward this resolution to the Secretary-General of the United Nations for referral to the appropriate United Nations bodies, including the conference of the Committee on Disarmament.

(This draft resolution was submitted by Australia, Canada, Chile, Colombia, Fiji, Indonesia, Japan, Malaysia, New Zealand, Peru, Philippines, Singapore and Thailand. The Report of the Sea-Bed Committee to the General Assembly states (A/8721, para. 274): "Both the delegations of France and the People's Republic of China objected to the adoption of this resolution and a consensus could not be reached in the Subcommittee on its adoption.")

Annex VI

RESOLUTION 3 (I) ADOPTED BY THE UNITED NATIONS CONFERENCE ON THE HUMAN ENVIRONMENT, STOCKHOLM, 5 TO 16 JUNE 1972

[See Annex 19 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 132]

Declaration of the United Nations Conference on the Human Environment

[See Annex 20 to the Australian Request for the Indication of Interim Measures of Protection, I, p. 133]

Annex VII

EFFECTS OF FRENCH NUCLEAR TESTING ON
RADIATION LEVELS IN NEW ZEALAND

In September 1957 a Cabinet directive of the New Zealand Government made its Department of Health responsible for monitoring the environmental radio-active contamination in New Zealand and in any Pacific area with which New Zealand was associated.

2. In compliance with this directive the National Radiation Laboratory of the Department of Health (at that time called "Dominion X-ray and Radium Laboratory") started to set up a network of sample collecting and monitoring stations in New Zealand, extending it later to Fiji, the Cook Islands, Western Samoa, Niue, Tonga, and the Gilbert and Ellice Islands.

3. The results of the measurements made by the Laboratory are published at regular intervals in a series of 50 detailed technical reports. The first of these reports ("Fall-out in New Zealand", Report No. DXRL-F¹) gave the results of the measurements made between July 1959 and June 1961, while the subsequent 49 quarterly and annual reports provided a continuous coverage of the levels of radio-activity observed by the Laboratory up to the end of 1972. The annual reports since 1966 and two reports concerned exclusively with French nuclear weapons tests are listed in an appendix hereto.

4. The extensive and continuous measurements made and published by the Laboratory, covering a period of over 13 years, provide a unique record of the changing pattern of environmental radio-active contamination in the area of the Pacific monitored by the Laboratory. The measurements give a clear indication of the extent to which radiation levels in New Zealand, and in the islands monitored by the Laboratory, have been affected by the nuclear weapons tests conducted by France in the Pacific.

5. A summary of the detailed results given in these reports follows. It deals under separate headings with the two kinds of fall-out resulting from nuclear weapons tests: *tropospheric fall-out* (causing short-term effects, specifically dealt with in Reports NRL-F/47 and F/49), and *stratospheric fall-out* (causing long-term effects specifically dealt with in reports NRL-F/49 and F/50).

Tropospheric Fall-out

6. Tropospheric fall-out from nuclear weapons tests arises from the injection of fission products into the lower atmosphere (below about 15 kilometres). It is usually associated with nuclear explosions in the kiloton range detonated near ground or sea level. It has a predominance of short-lived radionuclides of relatively high specific radio-activity, causing sudden increases in air radio-activity as the cloud of radio-active particles is carried along by prevailing winds. The gravitational settling of the radio-active particles floating in the troposphere, and their precipitation in rain, tends to occur at about the same latitude as that of the nuclear weapons test producing them. The deposition of decay of most of the fresh short-lived fission products from the troposphere is usually completed in a few weeks or months.

7. Nuclear weapons tests have been carried out by France in the Pacific

¹ See p. 344, *infra*.

between mid-May and early October, a period during which the prevailing winds can be expected to carry the fission products in an easterly direction across the Pacific towards South America, circling the southern hemisphere in about three weeks, sometimes circling it more than once.

8. The meteorological conditions selected for the nuclear weapons tests do not always ensure that the radio-active particles floating in the troposphere continue to drift eastward. Occasionally the air current carrying them has swung northward in an anti-cyclonic eddy and eventually turned westward, producing a "blow-back" which carried the slowly diffusing radio-active particles over islands in the Central Pacific area in a matter of days. Higher levels of radio-activity in air were then recorded and any rain occurring at the time ("rain-out") has deposited fresh fission products and increased the local level of radiation significantly.

9. Arrival of fresh fission products at the Laboratory's monitoring stations was detected after each of the French test series. Report NRL-F/49 shows graphically in figure 13 (p. 12) the average monthly radio-activity of air (total beta activity) at eight of its monitoring stations during the six French nuclear weapons tests series between 1966 and 1972. (There were no tests in 1969.) The average air radio-activity during each monitoring period at the same stations is given in table 3 on page 13 of the same Report and shown in graph 1 appended hereto. The significance of periodic increases in the radio-activity of air and of rainwater, and the correlation of these increases with the French nuclear weapons tests in the Pacific is discussed on page 7 of NRL-F/48 while figure 3 on page 9 of NRL-F/48 and figure 4 on page 19 of NRL-F/49 show the levels of total beta activity from fresh fission products in rain related to the dates of French nuclear weapons tests in the Pacific.

10. Iodine-131 is a critical contaminant when fresh fission products are deposited because of the high yield of this radionuclide produced in nuclear explosions, and because it is being selectively absorbed into the thyroid. The wide browsing habit of cows leads to a concentration in milk within one day of pasture contamination. Because of their small thyroids, children receive a higher dose than adults from the same intake; furthermore, children are likely to have a greater daily consumption of fresh milk. Because iodine-131 has a short half-life of eight days the level of contamination rapidly decreases over a few weeks unless further deposition occurs. The significance of periodic increases in the levels of iodine-131 in milk and in cattle thyroids is discussed on pages 15 and 16 of NRL-F/47 and shown graphically in figures 7 and 8 on pages 37 and 38 of that report, and in figure 5 on page 21 of NRL-F/49, related to the dates of French nuclear weapons tests.

11. Increases in gamma radiation levels provide a useful warning of the arrival of fresh fall-out products. A discussion of one such instance, arising from the rain-out of 16 September 1966 on Apia, Western Samoa, following the French nuclear weapons test of 12 September 1966, is given on page 10 of NRL-F/47 and shown graphically on page 33 in figure 2 of the same report. A discussion of external gamma radiation doses from fall-out depositions is given on pages 12 and 13 of NRL-F/47 with special reference to the "blow-back" rain-out at Apia, Western Samoa, and at Niue, on 16 September 1966 (see also notes 1 and 2 to table 4 on p. 24 of NRL-F/47). Internal radiation doses from drinking rainwater containing radio-active fall-out from French nuclear weapons tests are discussed on pages 13 and 14 of NRL-F/47.

12. The "blow-back" following the French nuclear weapons tests of 12 September 1966 has already been referred to above. In addition to the rain-out at Apia, Western Samoa, and at Niue, on 16 September 1966, increased radio-

activity in air was also detected at Nadi, Fiji, on 17 September 1966 and reported on page 7 of NRL-F/21. Other "blow-back" instances from French nuclear weapons tests in the Pacific were reported on pages 23 and 24 of NRL-F/28 (Western Samoa, 13 and 14 July 1967). Pages 17 and 19 of NRL-F/43 report indications of a "blow-back" after the nuclear weapons tests of 23 and 31 May 1970. There were also indications of a "blow-back" at Western Samoa on 14, 15 and 16 August 1970 from one or both of the French nuclear weapons tests of 3 and 7 August 1970. Similar indications were given by the rain collections at Funafuti and Aitutaki during the period 10 to 17 August 1970. Pages 10 and 15 of NRL-F/47 and figures 3 and 4 on pages 33 and 34 of the same report describe and show the westward progression of tropospheric fall-out from the nuclear weapons tests of both 6 and 13 June 1971, which was confirmed by the rain-water collection at Funafuti during the period 21 to 28 June, containing fission products from the test of 13 June 1971.

Stratospheric Fall-out

13. Stratospheric fall-out follows the injection of nuclear fission products into the upper atmosphere and largely results from the testing of nuclear weapons in the megaton range. Fine particles of radio-active debris carried into the stratosphere will there drift around the world for months or years before being transferred to the troposphere from where they are ultimately precipitated.

14. The delayed stratospheric fall-out contains no short-lived radionuclides since these undergo radio-active decay during their long stay in the stratosphere. There is a tendency for stratospheric fall-out to occur mainly in the mid-latitudes of the hemisphere in which the nuclear weapons tests were conducted. Therefore, tropical Pacific islands receive less of the stratospheric long-lived fall-out than countries in the temperate zone, such as New Zealand.

15. Two radionuclides in delayed stratospheric fall-out are of particular interest because of their long-term effects: strontium-90 and caesium-137. They have radio-active half-lives of about 28 and 30 years respectively, and they both enter the body through food chains.

16. Strontium-90 is deposited along with calcium in human bone where the rate of turnover is very slow and measured in terms of many years. It is a pure beta emitter and its potential somatic hazard arises from the dose delivered to bone and bone marrow; its potential genetic hazard is considered insignificant. The bone of young people, which was formed during the time of maximum stratospheric fall-out during the last 10 to 15 years, contains a greater concentration of strontium-90 than that of older people whose skeletons were formed before the large-scale nuclear weapons tests. The levels of strontium-90 in food reflect both the current rate of stratospheric fall-out and also the cumulative deposition on the ground.

17. Caesium-137 does not accumulate in a particular organ of the human body although it does tend to concentrate to some extent in muscle tissue. Its rate of elimination from the body is estimated at a few months. It is a gamma as well as a beta emitter, and the penetrating nature of the gamma radiations give an external dose to the whole body from deposited fall-out, as well as an internal dose from ingested material, thus making caesium-137 a potential somatic and a potential genetic hazard. Since caesium-137, deposited on the soil, tends to become fixed in the soil, levels of caesium-137 in food therefore tend to reflect the current rate of stratospheric fall-out rather than the cumulative deposition on the ground.

18. The highest levels of deposition of stratospheric fall-out in New Zealand

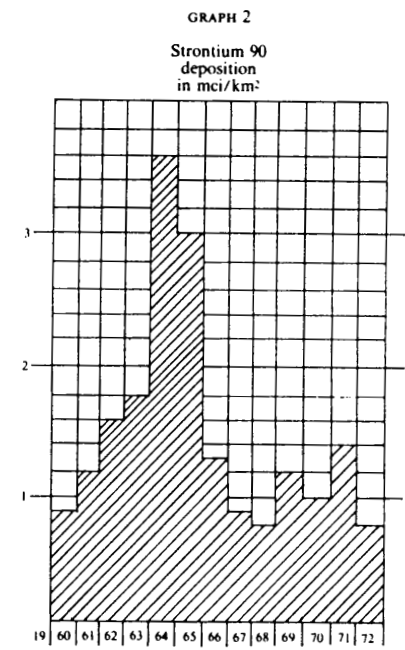
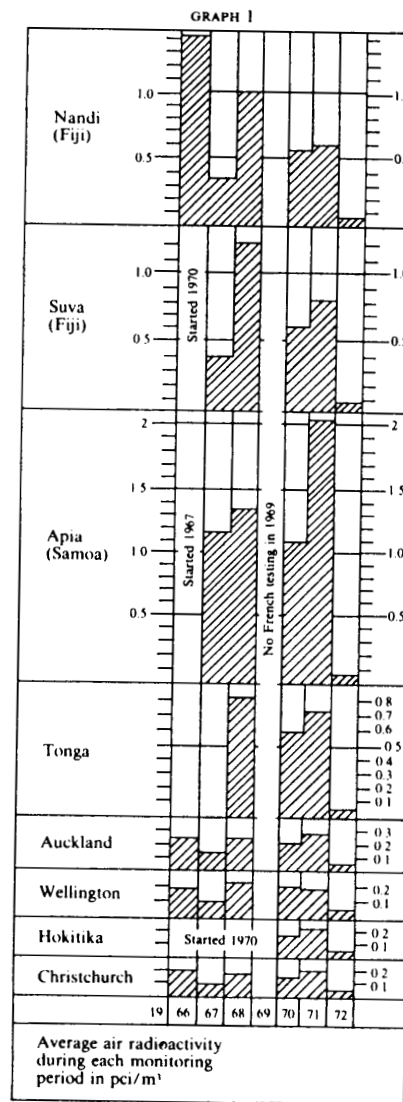
were reached during late 1964 and early 1965. They were caused by the large-scale nuclear weapons tests conducted in 1961 and 1962 by the USSR and the USA in the northern hemisphere and in the Pacific area, before the signing of the Partial Test Ban Treaty. During the years 1966 to 1968 stratospheric fall-out deposition levels fell steadily to a minimum in 1968, reflecting the gradual depletion of the reservoir of nuclear debris in the stratosphere. French nuclear weapons tests in the Pacific had started in 1966 and culminated in the detonation of two megaton devices in 1968, partially replenishing the stratospheric reservoir of nuclear debris. After a pause in 1969, the French series of nuclear weapons tests were resumed and both the 1970 and 1971 series included the detonation of a megaton device. As a result of these tests, stratospheric fall-out levels increased in 1969 in New Zealand and NRL-F/48 shows on pages 18 to 20 that practically all the strontium-90 deposited in New Zealand from 1968 onwards derived from the French nuclear tests in the Pacific with only a minor contribution from the interhemispheric transfer of debris from the high-yield Chinese nuclear explosion of 27 December 1968. The stratospheric reservoir of strontium-90 in the southern hemisphere from the 1961 and 1962 tests was shown to be substantially depleted by 1968 and debris from those earlier tests did not significantly contribute to the strontium-90 deposited since then.

19. NRL-F/50 shows in figure 4 on page 11 the New Zealand country-wide average levels of long-lived radionuclides in rain and milk since 1959. The countrywide average of annual deposition of strontium-90 is given in table 3 on page 12 of this report and shown in graph 2 appended hereto. The same report gives in table 4 on page 16 the average levels of strontium-90 in milk, and in table 6 on page 19 the countrywide New Zealand average levels of caesium-137 in milk. These are shown appended hereto in graphs 3 and 4.

20. NRL-F/50 also gives in table 3 on page 12 and in figure 5 on page 13 a comparison of the annual deposition of strontium-90 in New Zealand and at stations in the northern hemisphere, showing the continuing increase in New Zealand and the gradual decrease of the values in the northern hemisphere. The same report also gives in figure 7 on page 17 a comparison of strontium-90 levels in New Zealand milk and in milk at two northern hemisphere locations, showing the gradual reduction of the strontium-90 levels in the northern hemisphere, becoming at times even lower than the New Zealand levels.

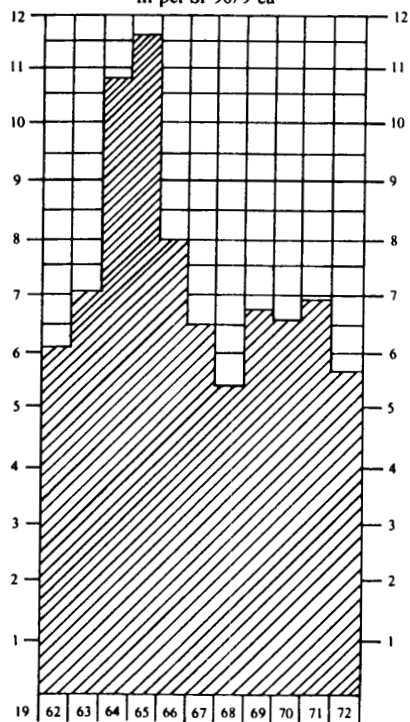
List of Relevant Reports of the New Zealand National Radiation Laboratory¹

- Quarterly Report October-December 1966 and Annual Summary on Environmental Radio-activity in New Zealand and results of extended monitoring of fall-out from French nuclear tests in the Pacific. Report No. NRL-F/23.
- Annual Summary 1967 Environmental Radio-activity in New Zealand and results of extended monitoring of fall-out from French nuclear tests in the Pacific. Report No. NRL-F/28.
- Annual Summary 1968 Environmental Radio-activity in New Zealand and results of extended monitoring of fall-out from French nuclear tests in the Pacific. Report NRL-F/33.
- Annual Summary 1969 Environmental Radio-activity in New Zealand and measurements on samples from Fiji and Rarotonga. Report NRL-F/38.
- Environmental Radio-activity in New Zealand and Pacific Area Monitoring Annual Summary 1970. Report NRL-F/43.
- Fall-out from nuclear weapons tests conducted by France in the South Pacific from June to August 1971 and comparisons with previous test series. Report NRL-F/47.
- Environmental Radio-activity Annual Report 1971. Report NRL-F/48.
- Fall-out from nuclear weapons tests conducted by France in the South Pacific during June and July 1972 and comparisons with previous test series. Report NRL-F/49.
- Environmental Radio-activity Annual Report 1972. Report NRL-F/50.



¹ See p. 344, *infra*.

GRAPH 3

Strontium 90 in milk
in pci Sr 90/9 ca

GRAPH 4

Cs¹³⁷ in milk
in pci/gk